

THE INSECT PEST SURVEY BULLETIN

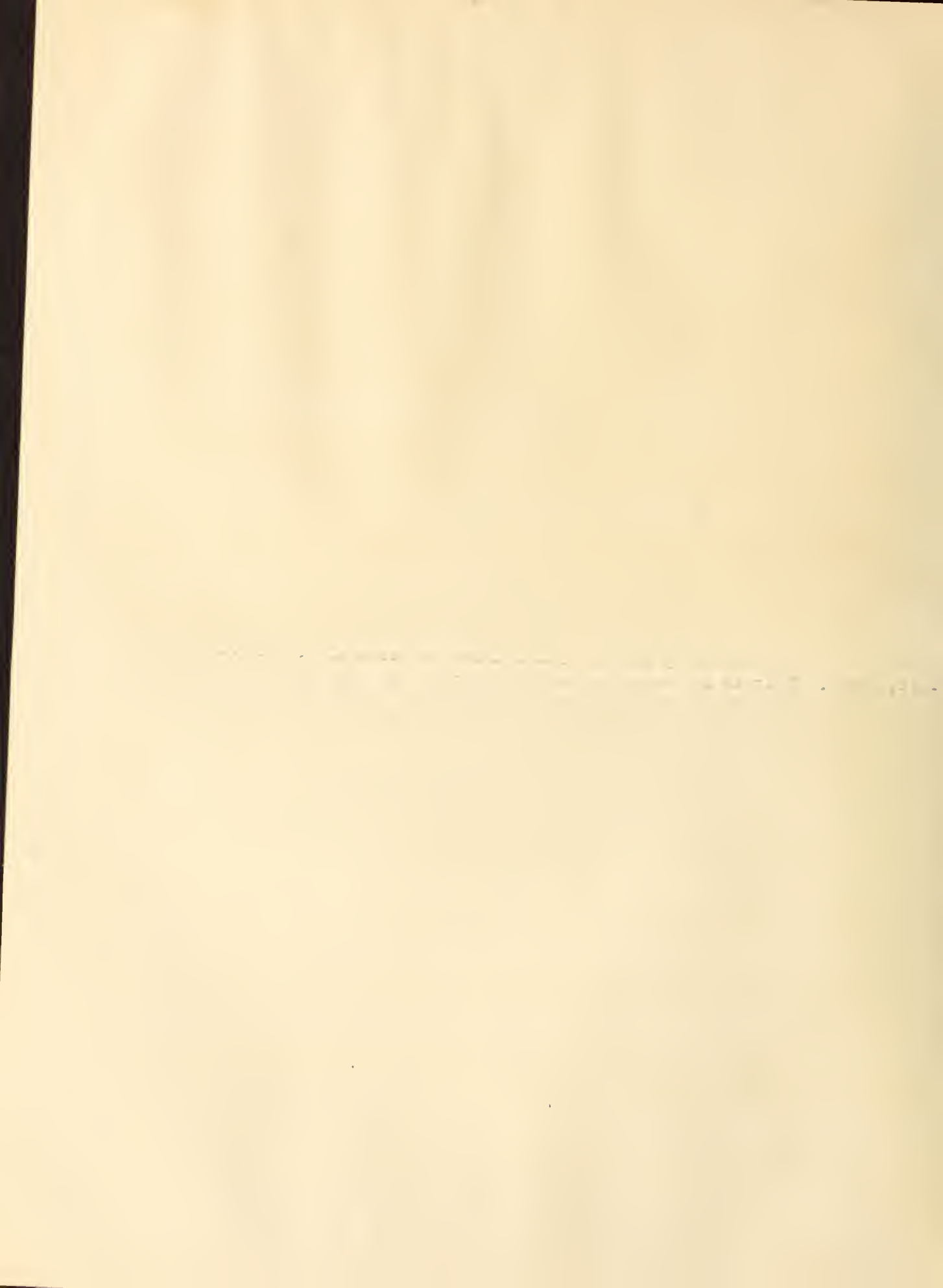
A periodical review of entomological conditions throughout the United States,
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OUTSTANDING ENTOMOLOGICAL FEATURES IN THE UNITED STATES FOR THE MONTH OF MAY, 1925

This month has been marked by more widespread cutworm injury than any similar period during the past four years. Notes on the destruction of large patches of pasture and corn in Ohio, Iowa, Missouri and Kansas, and reports of serious cutworm damage in northern Michigan, Connecticut, Indiana, Illinois, Idaho, and California have been received. The outbreak of the army cutworm in the Middle West has about terminated, heavy flights of the moths having been observed in Texas and pupation of larvae reported from Montana.

The chinch-bug situation has not materially changed since our last report, as is also the case with Hessian fly, with the single exception of Kansas where thousands of acres of wheat have been plowed under on account of the heavy infestation.

Flights of the armyworm moths have been observed in Indiana and Illinois during the last week in April. Armyworm damage has already been reported from northern Indiana and also northern Illinois.

Telegraphic communication dated May 27 has just been received from Alabama that larvae of the cotton worm are abundant near Corpus Christi. A note has also been received that on May 23 larvae were abundant in several fields near Brownsville, Texas. This is an unusually early appearance of this insect. In 1924 the first report was received from the Brownsville region on July 23; in 1923 the first report was received on June 8, and in 1922 on August 1. In 1921 the first larvae were observed in Lowndes County, Ala., on August 26. The average date for the past three years for the first appearance at Brownsville was July 7. The present appearance, 42 days ahead of the average and 10 days ahead of the earliest appearance of this insect in the past three years, is of decided interest as the early appearance of the larvae of this insect is usually indicative of serious damage before the bolls are formed. We can also expect damage later in the season by the moths attacking fruit in the Northern States.

The corn rootworm seems to be more troublesome than usual this year in the Southeastern and Gulf Region.

The pea aphid is reported as attacking alfalfa and clover over a very broad region, reports having been received from Connecticut, Michigan, Indiana, Illinois, and California.

The clover-leaf weevil seems to be very decidedly more prevalent this year than usual in Indiana, Michigan, and Iowa. It is also reported as causing some damage in Maryland and Kansas.

Tent caterpillars are again proving very numerous in the New England and Middle Atlantic States. A more restricted region of infestation is reported from Michigan.

Pear psylla infestation is general throughout the fruit sections of New York State.

The plum curculio has been materially retarded in the Georgia Peach Belt by dry weather. In Illinois and Missouri this pest is more prevalent than usual.

A limited but very serious infestation of the black-lined cutworm in blueberry plantations in Maine is reported this month, single growers suffering losses as high as \$12,000.

A species of *Julus* is assuming major importance as a potato pest in northeastern Ohio.

Damage for the first time to cultivated crops by Eleodes omis borealis Blaisd., one of the false wireworms, is reported from California.

A late report not included in this number of the Bulletin indicates that the Mexican bean beetle was taken in the field at Birmingham, Ala., March 30, three weeks earlier than in 1923 and 1924. By May 25 over 20 per cent of beetles had emerged in hibernation cages. The light infestation in this section is undoubtedly due to small number of beetles entering hibernation last fall on account of prolonged drought.

An interesting note of the gradual increase in destructiveness of the garden fleahopper to truck crops has been received from the west coast of Mexico.

Two unusual pests of strawberries are reported in this number, one the raspberry fruit worm attacking the young fruit in Connecticut, and the other a small beetle Brachypterolus pulicarius, feeding on the blossoms in New York State. The latter was reported doing similar damage in New York State in 1922 (ss I.P.S. Bulletin II, P.89, under Heterostomus pulicarius L.

In the Sinaloa region of Mexico the corn earworm is reported as having destroyed a very appreciable quantity of the cannery peas, estimates running from 1 to 50 per cent in different fields. This is the first record that we have of this insect being a serious pest to peas.

The camphor scale has been found for the first time in Vermilion Parish, La.

The elm leaf beetle is reported as seriously infesting trees in Dayton, Ohio, where up to this time it has not been a serious pest.

A very serious infestation of a rose house in the vicinity of Philadelphia by the Surinam roach is reported in this number. In one of the commercial houses in this vicinity approximately 30,000 plants have been girdled.

OUTSTANDING ENTOMOLOGICAL FEATURES IN CANADA FOR MAY, 1925

The outbreak of Dendroctonus monticola Hopk. in lodgepole pine at Martin Mountain, B. C., has extended very rapidly since last year. During the control operations commenced this season over 25,000 infested trees have been marked for cutting.

An extensive outbreak of Dendroctonus beetles in spruce has been discovered in the forests near Prince Rupert, B. C.

Control work conducted for the last two years on the pine bark beetle outbreak in the Aspen Grove forest, British Columbia, where 300,000,000 feet of yellow pine was threatened with destruction, has resulted in the infestation being almost entirely removed. It is believed that the success obtained is due in large measure to the rigid enforcement of slash burning throughout the yellow pine area.

Grasshoppers are not expected to cause any serious trouble in southern Manitoba during 1925.

An outbreak of the black army-cutworm Agrotis fennica Tausch., occurred over a limited area near Ottawa, Ont., during May. Some damage was done to clover and peas, but the outbreak was early checked by a fungus disease which destroyed the majority of the larvae.

The cricket, Anabrus longipes Caudell, is occurring in outbreak form at Kelowna and Vernon, B. C.

The leaf roller Cacoecia rosana L. is steadily spreading in the orchards of the Saanich peninsula, B.C.

There was a heavy deposition of eggs of the pear psylla, Psyllia pyricola Forst., in the orchards of the Burlington and Niagara districts., Ont., by the end of April.

GENERAL FEEDERS

GRASSHOPPERS (Acridiidae and Locustidae)

- Georgia O. I. Snapp (April 25): Grasshoppers have been unusually abundant in several orchards at Montezuma and Marshallville during the past week. In some sections, several orchards, especially in the lowlands, grasshoppers have devoured or seriously injured 50 per cent of the small green peaches.
- Mississippi R. W. Harned (March 11): Reports have been received from Gulfport, indicating that grasshoppers are causing serious damage to the flowers, shrubs, and other plants in the cemetery at that place. From the description given, this is probably the work of the Southern lubber grasshopper, Romalea microptera Palis. The grasshoppers are said to be rather thick on some of the lots in the cemetery and collect in large numbers on plants. It is reported that late in the afternoon the grasshoppers seem to seek shelter. (April 22): A letter from a correspondent at Hampton, Washington County, dated April 22, is as follows: "During the season of 1924 we had a very heavy infestation of grasshoppers, from which we suffered heavy damage on cotton and soybean crops. They ate up absolutely, so that not a stalk remained, about 40 acres of soybeans; and of cotton, many acres for considerable distances along ditch banks down into the fields. We are now finding large numbers of grasshoppers hatching out along the ditch banks; and this makes us fear the possibility of heavy damage again in the 1925 season."
- Minnesota A. G. Ruggles (May 13): On May 7 in Benton County we found that the eggs of the grasshopper Camnula pellucida Scudd. had passed through the winter in good shape and some of the eggs were hatching. All indications are that there will be several outbreaks in this part of Minnesota this year.
- Oklahoma J. E. Sanborn (May 7): Began hatching in southern part of the State April 1 and in the northern part April 30. Belated forms are now hatching. They are 75 per cent more numerous than last year.
- J. L. Webb (May 12): G. A. Maloney, of the Tallulah Laboratory, sent in the following note: "Poison has been required to control grasshoppers in Oklahoma."
- Montana R. A. Cooley (May 1): Crickets were reported on April 8 as recently hatched and very abundant at Camas Prairie, Sanders County. Damage to crops is expected. Am not sure of the species, either Peranabrus scabricollis Thom. or Anabrus simplex Hald.

WHITE GRUBS (Phyllophaga spp.)

- Wisconsin S. B. Fracker (May 14): Phyllophaga spp. turned up in large numbers in the spring plowing in central counties of this State.

- Indiana J. J. Davis (May 25): In addition to the numerous reports of white grubs turned up by the plow we have received a report on May 16 from Rushville that grubs were destroying wheat. Specimens accompanied the report.
- Nebraska M. H. Swenk (April): White grubs have been complained of as destroying lawns in all the southeastern counties of the State, but especially from the two southern tiers of counties lying between the 97th and 99th meridians, where this sort of injury has been especially heavy.
- CUTWORMS (Noctuidae)
- Connecticut W. E. Britton (May 22): Cutworms are seemingly more abundant this year on vegetable plants in Litchfield, Hartford, Tolland, and Middlesex Counties.
- Michigan R. H. Pettit (May 14): I am getting word of an outbreak of climbing cutworms, both in the northern part of the fruit belt in the Lower Peninsula and way up at Ewen in the Upper Peninsula, and these reports tell us that the cutworms are in unheard-of numbers. (May 21): We have received some larvae from the Upper Peninsula and, while they all died overnight, I was able to determine them as Noctua fennica Tausch. A letter received from the county agent at Ewen also tells me that the economic loss has not been heavy because there is not so much in the way of agriculture going on up there, but the damage done to wild plants has shown possibilities that have alarmed the whole county. Another species of cutworms which is destroying two-thirds of the buds of some trees in Montcalm County near Stanton, is still undetermined. Probably c-nigrum L. Mr. Gentner, who has just returned from Benzie County (Beulah), tells me that the species which is making a lot of trouble up there is something still different.
- Ohio G. A. Runner (May 15): Climbing cutworms have caused some damage to buds of apple in Ottawa, Erie, and Lorain Counties. Adults bred from larvae found feeding on buds of apple have been determined by S. E. Crumb of the Bureau of Entomology as Rynchagrotis cupida Grote.
- H. A. Gossard (May 21): I saw pastures of 60 acres in Licking County with hardly a spear of green grass left in them and 10-acre patches of destroyed grass were common through two or three townships. I was told that there were several much larger pastures in the same condition. In one pasture we found the worms had advanced in a solid front about 25 feet per day during a period of four days, eating everything before them. Counts of the number of worms per square foot on this advancing front were made from 3 square feet located at different points along the line and the average was 172 cutworms per square foot. In a few cases the caterpillars were entering fields of wheat and oats, destroying these as they went.

There was an outbreak near Columbus in 1886 very similar to the present one and it was estimated that year that three or four thousand acres of pasture was completely destroyed. I judge the damage this year will be as great or greater than this. We saw patches of pasture destroyed in Delaware County about 5 miles north of Delaware and this cutworm present. The bacterial disease now working on them will in all likelihood prevent a recurrence of the attack next year. Probably very few of these worms will pupate.

- Indiana B. A. Porter (May 21): More complaints have been received of garden cutworms than usual from home gardeners.
- J.J. Davis (May 25): Have been reported as destructive in gardens since April 30 from Indianapolis, Morgantown, Laporte, and Mishawaka.
- Illinois W. P. Flint (May 22): A few reports of cutworm damage have been received, but the insects seem to be less numerous than usual. All damage thus far noted was to early-planted corn.
- Iowa C. J. Drake (May 7): Cutworms are very abundant this spring. The W-marked, Noctua c-nigrum L., the bronzed, Nephelodes minians Guen., the greasy, Agrotis ypsilon Rott., and the dingy, Feltia subgothica Haw., seem to be the more common species. Several records have been received from various parts of the State. One farmer stated that he found as many as 25 cutworms in a square foot of ground near a hill of corn. The bronzed cutworm has started to pupate.
- Missouri L. Haseman (May 1-15): On May 12 most of the bronzed cutworms were apparently full-fed. They are widely distributed over the central part of the State. Some report them destroying pastures much like the armyworm.
- Nebraska M. H. Swenk (April): The outbreak of the army cutworm, Chorizagrotis auxiliaris Grote, reported upon under dates of March 26 and 31 and April 9, did not result as seriously as the enormous number of cutworms present in the winter wheat and alfalfa fields threatened, largely owing to the cool, rainy weather that prevailed over the heavily infested counties during the early part of April. The winter wheat in many fields was damaged but, having a good root system, continued to grow, while the weather held back the activity of the cutworms and in most cases the wheat eventually got ahead of the cutworms. In the alfalfa fields there has simply been a partial loss of the first cutting of hay, without any important killing out of the plants in the old fields. If dry weather had prevailed after the damage started the loss would undoubtedly have been very severe as the cutworms were exceedingly abundant. In one field north of Brandon, in Perkins County, a piece of sod measuring 4 by 5 inches was found to harbor 44 cutworms in and under it. Another one, slightly larger, harbored close to 60 cutworms. In a field just north of Madrid, Perkins

County, 65 cutworms were found in and under an old cornstalk lying on the ground. These hordes of worms, however, gradually reached maturity, for the most part, without completely destroying the growing crops, and these are now recovering, in large part, from the injury.

During April injury by this cutworm appeared more or less in counties to the east of the heavily infested area, but the damage has not been important. The counties especially reporting injury are Lincoln, Kearney, and Buffalo Counties, in the Platte Valley, and are almost wholly related to damage in alfalfa fields. At the present time complaints of injury by the army cutworm have entirely ceased.

Mississippi

R. W. Harned (May 21): Inspector N. D. Peets with headquarters at Laurel, Jones County, reports under date of May 12 as follows: "Cutworms are doing considerable damage on cotton in this section." The specimens that he sent in with this note have been identified by H. W. Allen as the granulated cutworm, Feltia annexa, and the shagreened cutworm, Feltia malefida.

Kansas

J. W. McColloch (May 22): The Kansas Crop Bulletin reports widespread damage from cutworms in corn over most of the State. We have received reports of injury in Atchison, Saline, Rooks, Geary, and Riley Counties. More abundant as compared with an average year. It is also of interest to note that moths (probably of the army cutworm) are very abundant in Marshall, Cloud, Riley, Pratt, and Sedgwick Counties. They are especially troublesome in houses.

Texas

C. H. Gable (April 21): A most unusual flight of Chorizagrotis auxiliaris Grote has occurred this month at San Antonio. Reports from various parts of the county state that people have suffered great annoyance by thousands of the moths getting into the houses at night.

Montana

W. C. Cook (May 22): Porosagrotis orthogonia larvae are quite common in south-central Montana and we may look for trouble next spring if the weather is favorable. Chorizagrotis auxiliaris is present in considerable numbers all over central Montana but there has been little damage. This species is now pupating.

Idaho

Claude Wakeland (April 30): Several hundred acres in south-central Idaho have been heavily infested with the western cutworm that has held the alfalfa back and Mr. Whitehead, our extension entomologist, has found that this condition has been generally confused with winter killing.

Don B. Whelan (May 7): I have received a number of specimens of the army cutworm, Chorizagrotis auxiliaris Grote, from Jerome County where they were injuring alfalfa. These specimens were sent in by the extension entomologist.

California

A. O. Larson (April 24): Cutworms are more abundant this year on truck crops in Stanislaus County.

CEREAL AND FORAGE-CROP INSECTS

WHEAT

CHINCH BUG (Blissus leucopterus Say)

- Illinois W. P. Flint (May 22): Examinations during the last week have shown chinch bugs even less abundant than was the case during the latter part of April. It now seems certain that no serious damage from the first brood of this insect will occur anywhere in Illinois this season. The weather for the past month has been extremely dry, and conditions in general have been favorable to the chinch bug had sufficient numbers survived the winter.
- Missouri L. Haseman (May 12): In some fields in west-central Missouri farmers are reporting that the pest is already affecting the wheat (overwintering adults). Mr. Wade has also observed several badly infested fields of wheat.
- Mississippi R. W. Harned (May 21): More complaints have been received in regard to chinch bug injury to corn this spring than during any previous year for a number of years. Most of these complaints have come from the Yazoo-Mississippi Delta section of the State, that is, the northwestern part of Mississippi. All the complaints received have been in regard to the injury caused to corn. Conditions have been very favorable for the increase of these insects, as during 1924 we had the longest drouth on record. This spring there has also been much less than the average amount of rainfall.
- Nebraska M. H. Swenk (May 25): Chinch bugs are more numerous and more widely spread over an area in southeastern Nebraska than they were last year at this time. We expect heavier infestation and more loss this year than last.
- Kansas J. W. McColloch (May 21): Chinch bugs are abundant in the wheat fields throughout the eastern two-thirds of Kansas, and are causing some loss. Their injury is obscured by the heavy infestation of the Hessian fly. Climatic conditions have been favorable for the bugs. Young bugs have been hatching during the past week.

HESSIAN FLY (Phytophaga destructor Say)

- Illinois W. P. Flint (May 22): The Hessian fly spring brood is more abundant than was indicated by our reports last month. Recent examinations made by S. C. Chandler, in southern Illinois, and by J. H. Bigger, in west-central Illinois, have shown a very high percentage of wheat culms infested by this brood. At the present time the average culm infestation is close to 50 per cent in many fields, with early-sown fields running as high as 90 per cent. In some cases late-sown fields show less than 10 per cent of the culms infested. The figures given include all culms on plants examined in whatever condition. In many cases where the infestation for culms will run as high as 25 per cent, the damage is not great

because of the fact that the infested culms are the smaller, later, weaker ones which would never make heads in any case; Judging by present indication, the fly is practically all in the full-grown larval or flaxseed stage. All wheat is in a poor condition owing to the very dry weather. Only 0.22 inch of rein has fallen at Urbana during May.

Iowa

C. J. Drake (May 7): The Hessian fly has been greatly reduced in numbers and it is very hard to find specimens in wheat fields. Over 90 per cent of the farmers in the winter-wheat-growing section of the State cooperated in the Hessian fly campaign last year.

Nebraska

M. H. Swenk (April): An inquiry into conditions in Johnson and Pawnee Counties, made during the present month, showed that while there was considerable Hessian fly in volunteer wheat plants and in drilled wheat sown considerably before the announced dates of safe sowing, the wheat sown on or after the announced date of safe sowing is practically uninfested.

Kansas

J. W. McColloch (May 21): Reports and surveys show that the Hessian fly is present in damaging numbers throughout nearly all the wheat-growing area of the State. Thousands of acres of wheat have been plowed under. The second spring brood is just beginning to emerge and further damage is anticipated before harvest. In many ways the present outbreak has been more destructive than any previous one.

WIREWORMS (*Elateridae*)

Idaho

Claude Wakeland (April 30): A toll of hundreds of acres of wheat has already been exacted by wireworms in the irrigated sections. Wireworm injury is so severe this season that we are planning making an extensive survey of Canyon County.

FALSE WIREWORMS (*Eleodes* spp.)

Idaho

Claude Wakeland (April 30): The false wireworms are proving very destructive to fall and spring planted grain in the dry-farming areas of eastern Idaho.

WHEAT STRAWWORM (*Harmolita grandis* Riley)

Kansas

J. W. McColloch (May 21): Samples of wheat infested by the straw-worm have been received from Great Bend and Greenburg.

A ROOT APHID (*Geocica squamosa* Hart)

Nebraska

M. H. Swenk (April): During the first week in April the wheat-root aphid, *Geocica squamosa*, was found so abundantly on the roots of smartweed in a stubble field in Nuckolls County that the question was raised as to whether it would be safe to plant corn in that field this spring.

CLOVER MITE (Eryobia praetiosa Koch)

Nebraska M. H. Swenk (May 25): This mite was swarming by the millions during the first week in May in a wheat field in Cheyenne County, causing the wheat to die out in spots.

CORN

ARMYWORM (Cirphis unipuncta Haw.)

Indiana J. J. Davis (May 10): First adults of this moth were noticed April 25 at Lafayette. There has been cool weather since. Adults were again noticed the night of May 10. (May 25): The armyworm, Cirphis unipuncta, has been reported (May 20) from several localities in Fulton County in northern Indiana. In all cases so far the worms were found in low lying meadow and pasture land.

Illinois W. P. Flint (May 22): A fairly heavy flight of armyworm moths occurred in the central and northern parts of the State during the last week of April. Caged specimens laid unusually large numbers of eggs. The worms are just beginning to hatch in the field and one report of injury has been received from the northern part of the State. The moth flight was not as heavy as in 1924 and although scattered damage is expected we do not look for a serious general outbreak.

SPOTTED CUCUMBER BEETLE (Diabrotica 12-punctata Oliv.)

South Carolina Philip Luginbill (May 18): A large field of corn planted on bottom land was completely destroyed at Columbia. The corn was planted about April 15.

Alabama J. H. Robinson (April 29): The southern corn rootworm is causing considerable destruction to corn that has been planted after the turning of vetch. This is one of our rather serious insect pests following this highly desirable legume.

Mississippi R. W. Harned (April 13): Although this insect probably always causes considerable damage in this State each spring, this year it seems to be more abundant than usual in certain places. Under date of April 13 a large planter at Natchez sent one of these insects to this office, stating that it was "working great damage to stands of corn in the black lands of the swamp. They get into the corn just as it gets above the ground. It has destroyed the stand upon 300 acres for us."

SOUTHERN CORN LEAF BEETLE (Myochrous denticollis Say)

Mississippi R. W. Harned (April 11): A correspondent at Dahomy, in Bolivar County, sent a number of beetles to us on April 11 that have been identified by J. M. Langston as Myochrous denticollis. The correspondent states that these beetles were on his corn and that he found

most of them in fields which have been in sweet clover for two years. On April 23 another correspondent from the same town sent in specimens of these beetles with the statement that they were causing damage to corn.

SEED-CORN MAGGOT (Hylemyia cilicrura Rond.)

- Ohio H. A. Gossard (May 22): The seed-corn maggot is very numerous and is very injurious all over the State.
- Illinois W. P. Flint (May 22): A few reports of injury about this insect, accompanied by specimens, have come in.

BILLBUGS (Sphenophorus spp.)

- Indiana J. J. Davis (May 18): Two Sphenophorus zeae beetles to nearly every hill of corn. The corn is 1 to 2 inches high. They work on the stalks below the surface of the ground and kill the plant. Present indications are that they will destroy a 25-acre field. Specimens were submitted.
- Kansas J. W. McColloch (May 22): The maize billbugs have been found in cornfields at Junction City and Ogden, in numbers sufficient to cause injury to the crop. This is the first time that this insect has proved troublesome in this part of the State.

WIREWORMS (Elateridae)

- Indiana J. J. Davis (May 25): Wireworms were reported May 21 from Orestes where they are destroying corn in the bottom lands.
- Kansas J. W. McColloch (May 21): Reports of wireworm injury to corn are just beginning to come in from Brown, Riley, and Sumner Counties. Abundance as compared with an average year seems to be about the same.

ALFALFA AND CLOVER

PEA APHID (Illinoia pisi Kalt.)

- Connecticut B. H. Walden (May 14-26): Abundance this year much more on alfalfa in Hartford, New Haven, and Middlesex Counties. The infestation is worse where the plants suffered from dry weather in 1924 and where the plants were slow in starting this spring, due to poor drainage. From 75 to 90 per cent of the plants were badly injured. An owner in East Windsor plowed his alfalfa under to plant corn. At North Branford and West Simsbury many aphids were killed by Empusa.
- Michigan R. H. Pettit (May 14): The pea aphid is reported as being very plentiful in some alfalfa fields.
- Indiana J. J. Davis (April 30): Reports were received of injury to alfalfa by this insect on April 28 and 29, from Decatur, LaPorte, and Knox.

All reports were accompanied by specimens and indicate considerable damage. All lots are accompanied by numerous ladybird beetle larvae and parasitized individuals. (May 7): The county agents of Decatur, Elkhart, and Marshall Counties were in today and reported increasing injury from the pea aphid on alfalfa. Spots are dying out and in some cases entire fields are threatened with destruction. Continued cool weather has checked parasite activity.

- Illinois W. P. Flint (May 22): A number of cases of injury to alfalfa by this insect have been reported in the northern part of the State. The aphid reached the maximum about May 1 and since that time they have been practically cleaned out by parasites and predators. In a recent examination of alfalfa it has been difficult to find living pea aphids, although parasitized individuals were numerous.
- Nebraska M. H. Swenk (May 25): Several fields of alfalfa were badly injured by pea aphid in Dawson County.
- Wyoming C. L. Corkins (May 12): The pea aphid have just been received from the county agent at Casper, who states that these lice are attacking small patches of alfalfa. Damage is slight, but severe in spots.
- California C. M. Packard (May 7): An extremely heavy infestation is reported in nearly all fields in the northeast portion of Antelope Valley, in the vicinity of Roosevelt, about 9 miles northeast of Lancaster. Illinoia pisi has been present all spring but is now much reduced by coccinellids and syrphids. The first cutting was completely lost and in some fields a portion of the plants have been actually killed.
- R. E. Campbell (May 8): The attack of the pea aphid on alfalfa in the Antelope Valley in northern Los Angeles County is on the wane. Considerable damage was done to the first crop, some farmers claiming that in a few cases the attack was so severe as to kill the plants. Ladybirds and syrphids are now very numerous and the aphid fungus is plentiful. It is expected that the infestation will be practically wiped out by these natural enemies, though this natural control will be, as is usually the case, too late to save the first crop from damage.
- ALFALFA WEEVIL (Phytonomus posticus Gyll.)
- Idaho Claude Wakeland (April 30): At this date the alfalfa weevil is just beginning to oviposit freely where, at the same time last season, worms had already grown to maturity. From indications now injury from the weevil will occur at the end of the first crop and on the second crop.

CLOVER-LEAF WEEVIL (Hypera punctata Fab.)

- Maryland E. N. Cory (April 27): Present in numbers in all fields examined. The disease that causes the larvae to curl around the tips of grass blades before dying is abundant.
- Indiana J. J. Davis (May 25): Reports show that this insect was responsible for considerable damage to some clover fields in the central and southeastern sections of Indiana.
- Michigan R. H. Pettit (May 14): The clover-leaf weevil has actually injured some alfalfa fields quite seriously. The adult beetles are present in large numbers feeding on alfalfa near Lansing, and the larvae are reported in other parts of the State as doing serious injury. Practically always in the past *Entomophthora* has appeared before very serious damage has resulted. Sometimes, however, as in this case, the beetle runs for a time before the disease catches up with it.
- Iowa C. J. Drake (May 7): The clover-leaf weevil occurs in unusually large numbers near Shenandoah. It entirely destroyed a 15-acre field of clover. Other reports from Page County indicate that the clover-leaf weevil is also doing some damage to alfalfa fields.
- Kansas J. W. McColloch (May 21): Larvae of the clover-leaf weevil were numerous in alfalfa fields at Iola.

LESSER CLOVER-LEAF WEEVIL (Phytonomus nigristrostris Fab.)

- Illinois W. P. Flint (May 22): Adults of the clover bud weevil, Phytonomus nigristrostris, were abundant in clover fields during April and it is almost impossible to find a single stem of the clover which does not show the result of infestation by one or more larvae of this snout beetle. Examinations made during the last two weeks in four counties in east-central Illinois show this condition to be general. Examinations by J. H. Bigger, in western Illinois, show as high as 95 per cent of the clover stems infested. This insect is certainly becoming an important factor in clover production in this State.

CLOVER HEAD CATERPILLAR (Laspeyresia interstinctana Clem.)

- Illinois W. P. Flint (May 22): Adults of this species are very abundant in clover fields at the present time.

FRUIT INSECTS

MISCELLANEOUS FEEDERS

MARGE FLIES (Ribio spp.)

- North Carolina F. Sherman (May 13): This supposedly harmless fly, Ribio femoratus Wied., has been abundant on fruit-bloom, etc., and has several times been sent in during April under fear that it is a pest. The same experience was had in 1916.
- Indiana J. J. Davis (May 25): Have been reported as abundant the past two weeks at Spencerville, Monticello, and Columbus.
- Montana R. A. Cooley (May 4): Ribio albipennis Loew was reported from Lake County. The white larvae in the soil are reported each year in this State as injurious to the roots of various plants. We have had some reports this year. The adults are frequently taken hanging to foliage of currant bushes and often thought to be the cause of damage to tender leaves which really were damaged by the wind.

APPLE

APHIDIDAE

- Connecticut M. P. Zappe (May 23): In some orchards the aphids have been very much reduced by their natural enemies. In other orchards there are still plenty of aphids left. The first brood of adult syrphids are emerging now.
- New York A. B. Buchholz (May 9): In general these insects do not appear as abundant as in past years in Columbia County.
- Pennsylvania H. E. Hodgkiss (April 29): The green and grain aphids hatched early and it was not uncommon to find as high as 120 or 130 to a single bud; in fact, they are about equal as regards numbers and in many instances resembled a swarming of bees.
- Missouri Otis Wade (May 8-11): Aphis sorbi Kalt. and A. pomi DeGeer on apple in St. Louis region. Unsprayed trees are curling badly and fruits are beginning to show injury. Both species are found together and about equally abundant. Coccinellids and syrphids are abundant.

GREEN APPLE APHID (Aphis pomi DeG.)

- New York C. C. Wagoner (April 11): Green apple aphids were found in considerable numbers on the buds in Ulster County.
- G. E. R. Hervey (April 13): In Dutchess County they are numerous in all orchards observed.

A. B. Burrell (May 18): They are very scarce at the present time in Ontario County.

E. P. Felt (May 25): Have been only moderately abundant, though the extreme cold weather now prevailing is favorable to a considerable if not large increase.

Indiana F. N. Wallace (April 29): This species is already very abundant on Spirea van Houttei around Indianapolis.

H. F. Dietz (May 19): The green apple aphid has been very abundant on Spirea van Houttei but does not seem to be particularly abundant on apple.

APPLE-GRAIN APHID (Rhopalosiphum prunifoliae Fitch)

New York C. C. Wagoner (April 11): Very numerous on the opening buds in Ulster County.

Wisconsin S. B. Fracker (May 12): Aphids average one or two to the blossom in southeastern Wisconsin.

Minnesota A. G. Ruggles (May 13): At St. Paul the species of plant lice on the apple which have been so abundant prove to be Rhopalosiphum prunifoliae.

ROSY APPLE APHID (Anuraphis roseus Baker)

New York C. C. Wagoner (April 11): Nymphs are few in number at the present time in Ulster County. The first ones were observed April 8.

G. E. R. Hervey (April 13): Rosy apple aphids have been observed in practically all orchards but in small numbers in Dutchess County.

E. P. Felt (May 25): Have been only moderately abundant, though the extreme cold weather now prevailing is favorable to a considerable if not large increase.

Pennsylvania H. E. Hodgkiss (April 29): The rosy aphid appear to be of greater State-wide abundance than at any time during the last five years. Observations made in 40 counties indicate that the infestation is about equally severe over the entire State.

Maryland E. N. Cory (April 23): Mixed infestations of the rosy and green aphids are present in many orchards in Washington County. Abundance is about as much as would be expected in a year of considerable damage to the crop.

Indiana H. F. Dietz (May 19): No heavy infestations of the various kinds of plant lice attacking apple have been reported or seen up to the present time although the rosy apple aphid is present in moderate numbers in some locations.

B. A. Porter (May 21): During the past three weeks the rosy aphid has developed into a serious outbreak in many of the orchards in the southern part of the State. In some orchards serious losses will be sustained. The first winged migrants were noted on May 15.

Illinois W. P. Flint (May 22): No injury from this species has been reported or seen in the Illinois orchards this season. In a recent examination of a number of orchards in the western and central parts of the State, only two twigs showed infestation by this species although a special lookout was kept for this aphid in all orchards visited.

CODLING MOTH (Carpocapsa pomonella L.)

Illinois W. P. Flint (May 22): Emergence of the codling moth from overwintering larvae has been prolonged by the cold weather of the first part of May. The maximum emergence of the insect is just occurring in the central Illinois district. Emergence started at about the usual period in the development of the fruit.

Missouri Otis Wade (May 8-11): Moths are very late in emerging in the St. Louis region. Very little work showing up yet.

L. Haseman (May 12): Moths emerging late, less than 50 per cent of moths out on this date. Pupae, 66 per cent; adults, 29 per cent, and larvae, 5 per cent.

Washington E. J. Newcomer (May 1): Owing to the early season, the codling moth began emerging earlier than usual, the first moths being noted at Yakima April 16.

AN APPLE LEAF ROLLER (Species undetermined)

Ohio H. A. Gossard (May 22): One of the apple leaf rollers, a species undetermined, was observed to be quite numerous in an orchard at Delaware May 19.

FRUIT TREE LEAF ROLLER (Cacoecia argyrospila Walk.)

New York¹ C. R. Crosby and assistants: First larvae of this insect were found in Monroe County on April 26 and in Orleans and Cayuga Counties about May 8.

Montana J. R. Parker (May 1): In the Bitter Root Valley leaf rollers began hatching about April 20 and were complete about May 1. About 84 per cent of eggs hatched, which is about normal. Apparently no damage to eggs by a severe freeze last November, which killed many varieties of apple trees.

CIGAR CASE BEARER (Coleophora fletcherella Fern.)

PISTOL CASE BEARER (Coleophora malivorella Riley)

New York

C. R. Crosby and assistants: Larvae of this insect were still in hibernation in Monroe and Wyoming Counties on April 11. Damage so far is but slight.

EYE-SPOTTED BUDMOTH (Spilonota ocellana D. & S.)

New York

C. R. Crosby and assistants: The first part of May this insect was generally abundant and doing considerable damage in Genesee, and Onondaga Counties. By the middle of the month moths were very numerous in Dutchess County.

E. P. Felt (May 25): Appears to be only moderately abundant in the Hudson Valley.

Ohio

G. A. Runner (May 16): The budmoth was observed to be abundant and has caused considerable damage to young apple in the vicinity of Florence. Infestation was found to be general over an orchard of about 1,000 three-year-old trees.

LEAF CRUMPLER (Mineola indigenella Zell.)

Missouri

L. Haseman (May 12): In central Missouri young orchard trees show an unusual abundance of the overwintering cases and caterpillars which are now approaching maturity. Attacking apple, haw, quince, and plums.

FALL CANKERWORM (Alsophila pometaria Harr.)

New York

E. P. Felt (May 25): Eggs were extremely abundant in one orchard in Westchester County and the probabilities favor a somewhat serious infestation in that general section.

TENT CATERPILLAR (Malacosoma americana Fab.)

Connecticut

W. E. Britton (May 22): Tent caterpillars have been unusually abundant throughout the State on apple and wild cherry.

New York

C. R. Crosby and assistants: Eggs hatched about the middle of the month in Orange, Greene, and Dutchess Counties.

E. P. Felt (May 25): Moderately to extremely abundant in the Hudson Valley and on Long Island. The caterpillars are nearly full grown and are scattering in northern Columbia County.

H. C. Odell: Our tent caterpillar campaign in Suffolk County has come to a close with a total collection of approximately 550,000 egg masses.

J. G. Curtis: Report of Tent Caterpillar Egg Mass Campaign in Westchester County, February 16-28.

City and Towns:	Total masses	::	City and Towns :	Total masses:
New Rochelle. . . .	34,046	::	Mt. Pleasant. . . .	375,056
Mt. Vernon	9,590	::	New Castle.	66,224
Yonkers.	74,967	::	North Castle. . . .	122,936
White Plains. . . .	74,444	::	North Salem. . . .	12,194
Bedford.	101,938	::	Ossining.	74,006
Cortlandt.	188,531	::	Poundridge.	34,187
Eastchester. . . .	20,820	::	Rye.	63,777
Greenburgh. . . .	199,879	::	Somers.	39,614
Harrison.	133,111	::	Scarsdale.	27,643
Lewisboro.	41,966	::	Yorktown.	103,332
Mamaroneck. . . .	22,048			
Total			1,820,309	

Maryland E. N. Cory (April 25): Nests of newly hatched larvae abundant on wild cherry in Howard County.

Michigan R. H. Pettit (May 21): Mr. Gentner reports enormous numbers of tent caterpillars in the vicinity of Cadillac and over quite a large area of which Cadillac is the center. He says that he found as many as 12 on some trees, mostly on pin cherry and other wild stuff, although they are working in the commercial cherry orchards and apple orchards as well.

APPLE RED BUG (Heterocordylus malinus Reut.)

New York C. R. Crosby and assistants: By the middle of May apple red bug was present in noticeable numbers in Orange and Dutchess Counties and quite numerous in Onondaga County.

E. P. Felt (May 25): Appear to be only moderately abundant to somewhat scarce in the Hudson Valley.

FALSE APPLE RED BUG (Lygidea mendax Reut.)

New York E. P. Felt (May 25): Appear to be only moderately abundant to somewhat scarce in the Hudson Valley.

TARNISHED PLANT BUG (Lygus pratensis L.)

Pennsylvania H. E. Hodgkiss (April 29): The tarnished plant bug adults are numerous in the opening apple cluster buds where they appear to be doing considerable damage.

Indiana J. J. Davis (May 25): Has been reported as abundant in several orchards in the southern half of the State. Apples, apparently injured by this insect, have been received. The injury resembles that of the apple red bugs.

BUFFALO TREEHOPPER (Ceresa bubalus Fab.)

- ew York A. S. Mills (April 11): Punctures on apple limbs in Greene County were found rather commonly in a few orchards.
- hio G. A. Runner (May 10): Numerous reports have been received of injury to young apple trees. The buffalo treehopper is abundant in the commercial fruit growing districts along the South Shore of Lake Erie and seriously interferes with the growth of young fruit trees in sod or along borders. Severe damage has been noted in orchards in alfalfa sod and trouble from this insect has prevented the practice of growing alfalfa in young apple orchards from becoming more general.

PUTNAM'S SCALE (Aspidiotus ancylus Putn.)

- Vermont C. R. Crosby (March 18): Infested bark received from Bennington.

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

- New York C. R. Crosby and assistants: By the middle of April reports were received of light infestations in Onondaga, Ontario, and Erie Counties.
- Ohio G. A. Runner (May 15): No increase in infestation over previous years can be noted. Examinations of peach orchards in Ottawa and Erie Counties show an extremely light infestation and there seems to be no evidence that the usual lime-sulphur sprays are not thoroughly effective. Some of the orchards under observation are in a locality where one of the earliest outbreaks of the San Jose scale in the Eastern United States occurred. Counts of scales from twigs of unsprayed apple made during the period April 20-May 10 indicate a high winter mortality. Six collections showed a survival of 47.2 per cent.
- Indiana B. A. Porter (May 21): First crawlers appeared May 20, which is 7 to 10 days ahead of normal and 20 days ahead of last year. This early start on the breeding season will probably enable the scale to overcome to a large extent the extreme winter mortality which has occurred.

- Washington E. J. Newcomer (May 1): Counts of scale in the Yakima Valley show a mortality of 35 to 65 per cent, due to the prolonged cold weather of December 16-27, 1924, during which time the temperature was below zero seven nights and reached a minimum of 10 below. In the spring of 1924 only 5 to 15 per cent of the scale was dead.

OYSTER-SHELL SCALE (Lepidosaphes ulmi L.)

- New York P. J. Chapman (February 10): Infested twigs received from Oyster Bay.
- D. L. Hayes (April 11): Prevalent in a few orchards at Genesee in Wyoming County.

Indiana H. F. Dietz (April 28): The oyster-shell scale, the light brown form of Glenn, was hatching in large numbers on April 22 to 26. This is the earliest hatching since 1922, at which time hatching began on April 24. In 1924 the first hatching date was May 16 and hatching continued intermittently until June 1. These records are on material that has been under observation since 1921.

J. J. Davis (April 30): Eggs of the oyster-shell scale were not hatching at Lafayette on April 29 although Mr. Dietz reports hatching at Indianapolis.

ROUNDHEADED APPLE TREE BORER (Saperda candida Fab.)

Virginia W. S. Abbott (May 18): A borer, apparently S. candida, has killed or seriously injured a number of young apple trees in a small orchard near Vienna.

APPLE FLEA WEEVIL (Orchestes pallicornis Say)

New York D. D. Ward (April 25): A very severe infestation was observed in one or two plantings in Onondaga County.

Indiana B. A. Porter (May 21): Slightly more abundant than last year. On May 7 I noted the first pupa and on May 16 nearly all the larvae were mature and one-third of them had pupated.

FRUIT-TREE LEAF SYNETA (Syneta albida Lec.)

Washington E. J. Newcomer (May 1): This is the first time this insect, which is a rather important pest in the coastal regions of Washington and Oregon, has been noted in the Yakima Valley. It has previously been reported, east of the Cascade Mountains, only at Walla Walla.

CLOVER MITE (Bryobia praetiosa Koch)

New York D. D. Ward (April 11): The eggs of this pest are found very commonly in orchards in south Onondaga.

EUROPEAN RED MITE (Paratetranychus pilosus C. & F.)

Connecticut Philip Garman (May 22): Dry weather in the section about New Haven has favored development. More abundant than at this time last year.

New York E. P. Felt (May 25): Eggs were somewhat numerous in some northern Columbia County orchards in early spring. Many mites hatched, though there appears to have been a material decrease in the infestation during the last two weeks.

Ohio H. A. Gossard (May 22): The European red mite has been very conspicuous in orchards at Waterville, Hubbard, and Youngstown, and in fact over nearly all of northern Ohio.

Washington

E. J. Newcomer (May 1): This mite seems to be less common than usual in the Yakima Valley. Winter eggs were noted this spring as often as heretofore. Predacious enemies of this mite were very numerous during the fall of 1924 and evidently interfered with the normal deposition of winter eggs, which hatched April 10-17.

PEAR

PEAR THRIPS (Taeniothrips inconsequens Uzel)

New York

C. R. Crosby and assistants: From the 11th to the 18th of the month this insect was emerging. The injury apparently has been slight in Ulster, Greene, Dutchess, and Columbia Counties.

PEAR PSYLLA (Psylla pyricola Foerst.)

New York

C. R. Crosby and assistants: Reports received the middle of the month indicate that this insect is very abundant and infestation is heavy in general in Ulster, Orange, Monroe, Greene, Wyoming, and Dutchess Counties.

PEAR-LEAF BLISTER MITE (Eriophyes pyri Pgst.)

Connecticut

M. P. Zappe (May 22): Very severe on young pear trees, especially Bartlett and Seckel at Bantam.

FALSE TARNISHED PLANT BUG (Lygus invitus Say)

New York

A. B. Burrell (May 4): These insects were first observed on this date in Ontario County.

SINUATE PEAR-TREE BORER (Agrilus sinuatus Oliv.)

New York

C. C. Wagoner (April 11): This pest has extended its range a mile or two this year in Ulster County.

PEACH

GREEN PEACH APHID (Myzus persicae Sulz.)

Connecticut

W. E. Britton (May 21): Fruit spurs and twigs around the center of most trees at Hamden and Southington have curled leaves. Not many leaves curled on terminal twigs. Some orchardists are dusting with sulphur-nicotine; others are afraid of killing off the natural enemies which, in some orchards, bid fair to soon control the aphids. Lady beetles are abundant and syrphid larvae are present.

New York

C. C. Wagoner (May 14): In Ulster County several heavy infestations have been found.

L. E. Fitch (May 16): Several very heavy infestations have been noted in Nassau County.

Ohio

H. A. Gossard (May 22): The green peach aphid was reported as very damaging to peach blossoms at Clyde during the first week in May.

E. W. Mendenhall (May 25): These insects do considerable damage to the peach trees at Columbus. Destroy the leaves by curling.

BLACK PEACH APHID (Anuraohis persicae-niger Smith)

North Carolina F. Sherman (May 13): Several reports have been received; apparently a season of moderate, but not epidemic, abundance.

PEACH BORER (Aegeria exitiosa Say)

Georgia

O. I. Snapp (May 15): Complaints in regard to very heavy peach borer infestations where paradichlorobenzene was not used last fall have reached the laboratory from growers in the Georgia Peach Belt.

LESSER PEACH TREE BORER (Aegeria pictipes G. & R.)

Georgia

O. I. Snapp and assistants (May 1): Adults are now emerging at Fort Valley. As usual the insect is common in neglected orchards.

PLUM CURCULIO (Conotrachelus nemuphar Hbst.)

Connecticut

M. P. Zappe (May 23): At Mt. Carmel either adults are very much later than last year or are less plentiful, probably the latter as the season is a little ahead of last year.

North Carolina

F. Sherman (May 13): Dr. R. W. Leiby and J. A. Harris are working with this insect among our commercial growers and report it as more abundant than in previous seasons.

Georgia

O. I. Snapp (May 15): The very dry weather of the last two months has materially retarded the activity of the curculio. On account of the low mortality during the mild winter and the increase in the curculio population a year ago, as a result of a large quantity of fruit left in the orchards, it was feared that much trouble would be experienced this season in the Georgia Peach Belt from this insect. However, the drought has curbed its activity by bringing about mortality of the larvae when they fail to get the proper nourishment in dry peach "drops" and when unfavorable conditions for pupation are presented.

Illinois

W. P. Flint (May 22): The plum curculio, as indicated in an earlier report, is much more abundant than usual both on apple and peach. S. C. Chandler reports sprayed peach orchards in southern Illinois showing from 45 to 50 per cent injury by the curculio. Apple orchards in west-central Illinois also show more egg punctures than in normal years.

Missouri Otis Wade (May 8-11): In the St. Louis region cherries and plums were badly stung before the regular "shuck" spray could be applied. Unfavorable weather has prevented effective spraying. Unsprayed fruits were damaged 75 per cent and sprayed fruits damaged slightly. The abundance of curculios is above the average.

ORIENTAL FRUIT MOTH (Laspeyresia molesta Busck)

Connecticut Philip Garman (May 22): Emergence of the oriental peach moth began May 5 at New Haven and first eggs were obtained May 15. There is no sign of the insect as yet in twigs in the field.

Maryland E. N. Cory (April 23): Eggs are present on foliage of quince at Ringgold. Moths are flying in abundance.

Georgia O. I. Snapp and assistants (May 15): There is a break in the activity of the Oriental peach moth in the field at Fort Valley at the present time, apparently between the first and second generations, as indicated by the sudden absence of larvae in twigs in the field and observations in the insectary. A few second-generation eggs and larvae have been taken in the insectary. First-generation moths are emerging.

RED SPIDERS (Tetranychus sp.)

Georgia O. I. Snapp and assistants (May 15): At Fort Valley red spiders are unusually abundant at the present time on peach foliage. It is very dry; scarcely any rain has fallen since March 15.

RED-LEGGED FLEA BEETLE (Crepidodera erythropus Melsh.)

Connecticut W. E. Britton (May 14): Adult beetles have defoliated a young peach orchard at Danbury.

NEW YORK WEEVIL (Ithycerus noveboracensis Forst.)

New York A. D. Long (April 17): The insects were found doing injury to a block of 3-year-old peaches in Orange County.

BROAD-WINGED TREE CRICKET (Oecanthus latipennis Riley)

Indiana J. J. Davis (May 9): One row of a young peach orchard along a weedy fence row at Mitchell was badly infested with tree cricket eggs. Apparently it is Oecanthus latipennis, which we have found common in the State the past winter, judging from the description of egg punctures, etc., although we did not see specimens.

CHERRY

BLACK CHERRY APHID (Myzus cerasi Fab.)

New York C. C. Wagoner (April 11): These insects appear to be very numerous this year in Ulster County.

Indiana H. F. Dietz (April 30): A very heavy infestation of the cherry plant-louse, Myzus cerasi Ebb., was observed on several sour-cherry trees in the northern part of Indianapolis on April 28.

Wisconsin J. R. Arndt (May 4): Report of aphids on cherry at Marion.

SHOT-HOLE BORER (Scolytus rugulosus Ratz.)

Indiana H. F. Dietz (April 28): Following the severe defoliation of cherry trees in most localities in Indiana, due to the yellow-leaf disease, Coccomyces hiemalis Higgins and C. lutescens Higgins, last year and the past, rather drastic winter, considerable injury to these trees is expected this year. Already a number of reports of fruit-tree bark beetle injury to cherry have been received by this office from the vicinity of Indianapolis.

PLUM

RUSTY PLUM APHID (Hysteroneura setariae Thos.)

New York D. L. Hayes (May 2): An infestation of Aphis setariae has been found in Genesee County.

Georgia O. I. Snapp (May 15): This insect was very abundant in a commercial plum orchard several weeks ago at Fort Valley. An application of nicotine sulphate and the recent drought have completely cleaned up the infestation.

Missouri Otis Wade (May 9-11): Very abundant on unsprayed trees and injuring foliage seriously in the St. Louis region.

EUROPEAN RED MITE (Paratetranychus pilosus C. & F.)

New York W. D. Mills (May 2): Infestation found on several prune plantings in Wayne County.

TARNISHED PLANT BUG (Lygus pratensis L.)

Nebraska M. H. Swenk (April): From Douglas County during the last week in April came reports of serious injury to the buds of plum, cherry, and apricot trees by the tarnished plant bug.

PULVINARIA SP.

Georgia O. I. Snapp and assistants (May 8): The heaviest infestation ever observed of this insect on plum was noted today at Fort Valley.

RASPBERRY

RASPBERRY FRUITWORM (Byturus unicolor Say)

Michigan

F. L. Simanton (May 16): I wish to report a severe infestation of the raspberry beetle in Berrien County. This beetle will destroy thousands of cases of red raspberries in this County this year.

RED-NECKED CANE BORER (Agrilus ruficollis Fab.)

Missouri

L. Haseman (May 12): This year's crop of black raspberries is very severely damaged by last year's brood of borers. In some patches in central Missouri almost every cane is girdled by last year's brood. Small host parasites are abundant in galls, usually about four cocoons to each gall, species not determined.

BLACKBERRY

EUROPEAN FRUIT LECANIUM (Lecanium corni Bouche)

New York

C. R. Crosby and P. J. Chapman (February 9-13): Infested twigs received from Clarksville.

GRAPE

GRAPE LEAFHOPPER (Erythroneura comes Say)

New York

F. Z. Hartzell (April 25): Appear to be very scarce at Fredonia.

Ohio

G. A. Runner (May 5): Adults of the overwintering brood of the three-banded grape leafhopper (Erythroneura tricineta Fitch, var. cymbium McAtee) and other species injuring grape are not as abundant in most northern Ohio vineyard districts as in the spring of 1924. This decrease seems due to the comparatively light second brood of last season rather than to weather conditions during the winter. On the Lake Erie Islands where a heavy second brood occurred last year adults of the overwintering brood of several species of grape leafhoppers are numerous. (May 18); Damage to young shoots of grape by overwintering adults of E. vulnerata Fitch has been noted in a number of localities in Erie, Ottawa, and Lorain Counties.

Missouri

N. Turner (May): This insect is not present in the southwestern part of the State where the greater acreage of grapes is set. All indications show that the damage will probably be light this season.

California

B. A. Harrigan (April 20): This insect is reported as doing considerable damage this year. It is practically impossible to cite specific localities where injury has occurred as it has been so general and extensive.

A. O. Larson (April 29): In Stanislaus and Merced Counties the first brood are injuring all the lower foliage and appear to be doing much damage.

GRAPE FLEA BEETLE (Haltica chalybea Ill.)

- Connecticut B. H. Walden (May 22): Buds have been destroyed at South Glastonbury. New buds have formed on the vines. The crop has been damaged 40 to 50 per cent. Beetles apparently have left the vines.
- Pennsylvania H. E. Hodgkiss (April 29): The grapevine flea beetle or steely beetle is causing quite a lot of damage in several of the southern counties.
- Maryland E. N. Cory (April 27): No eggs yet at the College.
- M. D. Moore (April 28): Report of flea-beetles attacking grapes at Hagerstown.
- Missouri L. Haseman (May 14): During the past month this pest has been doing considerable damage in places, although where early applications of sprays were made they controlled the pest.
- Nebraska M. H. Swenk (April): The grapevine flea beetle was first noted on the grapes April 12, and 10 days later was being seriously complained of in several localities as injuring the grape buds. This appearance is nearly two weeks earlier than last year.

CLIMBING CUTWORMS (Lampra spp.)

- New York C. R. Crosby (May 10): Considerable injury noted at Crosby by climbing cutworms.
- Ohio G. A. Runner (May 15): Climbing cutworms have caused considerable damage to buds of grape in a number of localities. Injury has not, however, been as severe as in 1924. Several species have been observed to feed on the unopened buds, the more abundant species in the Sandusky vineyard section being Lampra cupida Grote.

APPLE TWIG BORER (Amphicerus bicaudatus Say)

- Nebraska M. H. Swenk (April): Several reports were received during April of injury to grape canes by the grape cane borer, Schistoccerus hamatus.

GRAPEVINE HOPLIA (Hoplia callipyge Lec.)

- California A. O. Larson (April 29): The grapevine hoplia, determined as Hoplia callipyge LeConte, appears in limited numbers annually in some sections, especially near Atwater, but growers in that section say that the insects are much more numerous than usual and that

they are infesting areas formerly uninfested. Ordinarily the shoots are only 3 inches long when the attack begins but this year the grapes are further advanced. The shoots are 12 to 15 inches long, consequently there is much more foliage.

CURRENT

APHIDIDAE

Minnesota A. G. Ruggles (May 13): Other plant lice noticed working at the present time at the University Farm are the currant aphid, Myzus ribis and the snowball aphid, Aphis communis (?).

CURRENT APHID (Myzus ribis L.)

Virginia W. S. Abbott (May 18): This aphid was noted for the first time about May 2 at Vienna.

IMPORTED CURRENTWORM (Pteronidea ribesi Scop.)

New York C. C. Wagoner (May 11): This insect was found hatching on May 11 in Ulster County and growers are generally applying spray for its control.

Indiana H. F. Dietz (April 28): The eggs of this insect began hatching on April 27. The fruit on the currants at this time is about the size of small peas, and this date is 10 days after the blooming period of the currants.

Minnesota A. G. Ruggles (May 13): The currant sawfly is at work at the present time laying eggs.

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

New York C. C. Wagoner (April 11): A much lighter infestation is in evidence in Ulster County than in former years.

BLUEBERRY

BLACK-LINED CUTWORM (Agrotis fennica Tausch.)

Maine E. M. Patch (May 12): These caterpillars have taken the blueberry crop over an area which at present estimation extends about 20 miles and every hour the scouts bring in new reports of damage. One man yesterday indicated his loss alone as \$12,000 and from the rate the larvae are working he seems sure to lose another \$12,000.

I have distributed the standard recommendations concerning cutworms - arsenical sprays, dusts, and poisoned bait. I have used also the Bureau of Entomology circular together with a garden cutworm circular of our own in order to get across the life history, especially the fact that the performance must have started late last summer or in early fall.

My especial need just now is to know the formula for sprays, dusts, or cutworm poisoned bait which is at present being recommended, if there is any change over those in the circular. One man intended yesterday to divide his area and test all three remedies. For this particular attack the poisoned bait would seem the best chance; but there is considerable fear of this on the part of some of the blueberry growers from the bird standpoint. In certain localities the crows are feeding in good shape on the cutworms.

The particularly pernicious feature of the attack is that the cutworms are taking only the blossom buds (not yet open). The surrounding colored bracts of the bud cluster are not touched. The young leaves have so far escaped for the most part. Of course, this type of feeding means that the larvae are concentrating on what will ruin the crop quickest.

There is something queer, too, about this daintiness of appetite. I can not think that the infestation could have accumulated to its present status on such a basis. I assume that the early-instar larvae last season were feeding on something other than blueberry. If I am right in calling this caterpillar Aerotis fennica, I assume that some member of the family Leguminosae would be the logical attraction for the moths at egg laying and for the young caterpillars. I can not at present think of any such plant in the blueberry barrens except "hop clover."

The caterpillars in the field are nibbling at Maianthemum canadense and wild raspberry but neither seem to rank as a real attraction.

As the larvae remain hidden during the day and as the injury to the blueberry is to be seen only on close examination, this was reported to us only a few days ago.

The larvae are exhibiting the army habit; but the usual methods applied against the real armyworm in grain fields can not be used here. A furrow can not be plowed in the barrens and the extent or direction of the movement can not be detected from the appearance of the vegetation except at close range.

PECAN

EUROPEAN WALNUT APHID (Chromaphis juglandicola Kalt.)

California

W. C. Barber (May 5): Serious damage to walnuts at Bakersfield.

A WHITE GRUB (Phyllophaga micans Knoch)

Alabama

J. M. Robinson (April 29): Just at present Phyllophaga micans Knoch is working on pecan foliage in the Mobile district. H. P. Loding of Mobile has just informed me that Dr. Van Allen of Baldwin County has sent in several specimens of Metachroma pallidum Say defoliating pecans and persimmons and doing considerable damage. The dead and dying Satsuma trees are being attacked by the Elaphidion inerme. The adults were emerging from the trees April 25.

CITRUS AND SUBTROPICAL FRUITS

RED SPIDERS (Tetranychus sp.)

Louisiana H. K. Plank and Ed. Forster (May 6): Red spiders have multiplied considerably in New Orleans and vicinity during the past six weeks, particularly on Citrus spp., Amelanchier persica, Verbena sp., and Cupressus sempervirens pyramidalis. The weather during this period was unseasonably hot and dry. Damage to crop was about 5 per cent on the average.

COTTON APHID (Aphis gossypii Glover)

California Clifford T. Dodds (May 7): During March and April the damage to orange trees in Ventura, Orange, and Los Angeles Counties was somewhat more than usual. As a rule, the damage is confined to trees less than 5 years old; this year, however, many of the oldest trees received aphid damage.

PERSIMMON PSYLLID (Trioxa diospyri Ashm.)

Louisiana H. K. Plank (May 8): A few adults were found on the young leaves today. Last year they were found very abundant on May 10-15 on both Japanese and native persimmon.

SERICA BEETLE (Serica fimbriata Lec.)

California R. R. McLean (May 1): Considerable injury reported to deciduous fruit trees and to avocados by Serica beetles, probably S. fimbriata, in San Diego County.

GLOVER'S SCALE (Lepidosaphes gloverii Pack.)

Louisiana H. K. Plank (May 6): This scale is increasing somewhat on unsprayed trees at New Orleans and vicinity, but has not yet reached normal abundance.

PURPLE SCALE (Lepidosaphes beckii Newm.)

Louisiana H. K. Plank (May 6): At New Orleans and vicinity this scale is increasing considerably on unsprayed trees but does not yet seem to have reached normal abundance.

CITROPHILUS MEALYBUG (Pseudococcus gahani Green)

California Clifford T. Dodds (May 7): Pseudococcus gahani continues to spread to new territory where considerable damage is caused in Orange and Los Angeles Counties. Old infestations are being controlled by the natural enemy Cryptolaemus montrouzieri Muls.

CITRUS MEALYBUG (Pseudococcus citri Risso)

Louisiana H. K. Plank (May 15): This pest is increasing considerably in abundance on unsprayed trees throughout the city of New Orleans, but trees which were sprayed last February with oil emulsions, containing 2 per cent of lubricating oil, still seem to be free from infestation.

TRUCK & CROP INSECTS

MISCELLANEOUS FEEDERS

MILLIPEDES

Ohio

H. A. Gossard (May 22): We received from Mingo Junction, a millipede, apparently belonging in the genus Julius, which was reported to be exceedingly damaging to potatoes and garden crops. What appears to be this same millipede came to us several times last season and the season before with the report that it was making the production of Irish potatoes impossible. Many farmers in northeastern Ohio the past two or three years have been compelled to cease the growing of Irish potatoes on account of this pest. Its injuries and distribution seem to be very much on the increase. It appears to have the ultimate possibility of being ranked as a major garden pest equal to or surpassing the white grub in destructive qualities.

A FALSE WIREWORM (Eleodes omisa borealis Blaisd.)

California

White C. Barber (May 2): This insect is moving from the desert plains on to pioneer cultivated areas (Kern Co.) damaging cantaloupes, watermelons, young deciduous trees, young vines, and all tender foliage; first damage reported April 27.

GARDEN SLUGS (Agriolimax agrestis L.)

Indiana

J. J. Davis (May 25): Have been reported damaging garden truck, especially lettuce at Fort Wayne May 19, Lafayette May 18, and Anderson April 21.

CHANGA (Scapteriscus vicinus Scudd.)

Alabama

J. M. Robinson (April 29): The Porto Rican mole cricket continues to be a serious pest in the southern portion of Alabama.

POTATO AND TOMATO

DARKLING GROUND BEETLE (Tenebrionidae)

California

A. O. Larson (April 24): Attacking tomato plants in Stanislaus County. Much more abundant as compared with last month.

GARDEN FLEAHOPPER (Halticus citri Ashm.)

Mexico

A. W. Morrill (May 11): This insect is one of the leading insect pests of tomatoes in Sinaloa and Nayarit, fluctuating in abundance in different districts from year to year. Three and four years ago it did not noticeable damage in the Fuerte Valley, which is the principal tomato-growing district on the Mexican West Coast. In the season of 1922-23 an outbreak occurred, covering less than 100 acres of a total of 5,000 or 6,000 acres of tomatoes growing in this district. During the season of 1923-24 the insect did heavy damage to about 1,000 acres of tomatoes. During the present season 1924-25 the fleahopper is still showing tendencies to increase

in the same district, and is doing damage and is present in destructive numbers over an area of 2,000 or 3,000 acres out of a total of about 10,000 acres of tomatoes, but is being held in check by a community effort under the direction of the Fuerte Valley Vegetable Growers Experiment Station, calcium cyanide dust being used. Attempts to breed out egg parasites from infested tomato leaves in the Fuerte Valley have thus far been unsuccessful. Although several thousand acres of tomatoes are grown between the Fuerte Valley and the Santiago Valley in Myarit about 350 miles farther south, no serious damage from the garden fleahopper has been observed or reported during the past season. At Santiago, however, one outbreak has been reported. Killing frosts occurred in the Fuerte Valley early in January. Old tomato plants from which first pickings had been made were killed back in most fields one-third to one-half of the length of the stems from the tips, while young plants which bore no fruit were as a rule uninjured. The minimum temperature recorded at the United Sugar Companies at Los Mochis was 35°, while at the Vegetable Growers Experiment Station the minimum recorded was 36°. Lower temperatures doubtlessly occurred in the fields. The unusually cold period lasted ten days. While the multiplication of the fleahoppers was checked by this cold spell, the effects were not as noticeable as in the case of the tomato plants. In general it is evident that in the winter-vegetable-growing districts on the West Coast of Mexico, low temperatures are not a factor influencing the fluctuations in the abundance of the garden fleahopper. This is more likely to be due to the egg parasites and possibly to fungus diseases.

POTATO BEETLE (Leptinotarsa decemlineata Say)

- Virginia Herbert Spencer (April 29): Several complaints from the eastern shore and Norfolk trucking districts of adult Colorado potato beetles on the early potatoes have been received. These insects seem much more numerous than usual at this time of the year.
- North Carolina F. Sherman (May 18): Reports from various sources indicate that this insect is more abundant than usual in the early-crop potatoes of eastern part of State.
- Mississippi R. W. Harned (May 23): The Colorado potato beetle was reported damaging tomatoes at Summit, Miss., on May 20.

POTATO FLEA BEETLE (Eoltrix cucumeris Harr.)

- New York C. R. Crosby and assistants (May 16): Moderate infestation has been noted fairly generally in Nassau County.

CORN EAR WORM (Heliothis obsoleta Fab.)

- Mississippi R. W. Harned (May 23): The tomato fruit worm was reported damaging tomatoes at Summit, Miss., on May 20.

SOUTHERN GREEN PLANT BUG (Nezara viridula L.)

Louisiana H. K. Plank (May 13): Several specimens were received from New Orleans, with a report that they were abundant in a garden on tomatoes, and at Mandeville a grower had to abandon the growing of his crop altogether on account of injury from these bugs.

CABBAGE

CABBAGE CURCULIO (Ceutorhynchus rapae Gyll.)

Indiana J. J. Davis (May 4): Within the last few days we have been receiving reports of injury to cabbage in seed beds by the cabbage curculio. The reports have come in from Lafayette and Crawfordsville, and at the present time the insect is in the egg and recently hatched larval stages. These are the first definitely reported attacks by this insect that have come to our attention during the last four years since I have been here.

CABBAGE MAGGOT (Hylemyia brassicae Bouche')

New York C. R. Crosby and assistants (May 16): Although loss from this pest was severe last year only a few growers are planning to treat their seed beds for the control of this pest this year in Onondaga County.

Ohio H. A. Gossard (May 22): The cabbage maggot is very numerous and is very injurious all over Ohio.

Indiana H. F. Dietz (May 19): A heavy infestation of the cabbage maggot has been reported from the truck crop district south of Indianapolis.

Connecticut W. E. Britton (May 22): At Windsor, Southington, and New Haven injury by this maggot is just beginning to show on early plants, some of which came from the South.

CABBAGE APHID (Brevicoryne brassicae L.)

North Carolina F. Sherman (May 13): Several reports have been received. This is probably a season of moderate abundance but not epidemic.

Mississippi R. W. Harned (March 20): On this date C. G. Wallace reports that plant lice are severely attacking cabbage in the vicinity of Water Valley, Miss.

Missouri L. Haseman (May 13): In the southwestern part of this State the cabbage aphid is doing serious damage in a number of patches.

HARLEQUIN CABBAGE BUG (Murgantia histrionica Hahn)

Mississippi R. W. Harned (April 18): Complaints are continuing from different parts of the State in regard to the abundance of the

Harlequin cabbage bugs this spring. A letter received today from a correspondent at Raymond emphasizes the value of mustard as a trap crop to protect the garden crops from this insect. This correspondent states that in her gardens there are hundreds of the bugs on the mustard, and not one can be found on rape, Irish potatoes, and other garden plants. She states that the mustard is of the old rough-leaf variety. (April 20): On this date C. G. Wallace reports the harlequin cabbage bug as fairly abundant in the vicinity of Water Valley on cabbage, mustard, and turnips.

STRIPED FLEA BEETLE (Phyllotreta vittata Fab.)

New York

C. R. Crosby and assistants (May 2): About a week ago these flea beetles appeared in great numbers in Nassau County, and it was thought that very heavy loss would result to cabbage plants. At the present time, however, their attack has abated. (May 16): As in past years this pest is doing considerable damage in seed beds in Ontario County.

STRAWBERRY

RASPBERRY FRUITWORM (Byturus unicolor Say)

Connecticut

B. H. Walden (May 22): At South Glastonbury this insect was observed for the first time on strawberries. Strawberries in a field adjoining a field of red raspberries which was removed this spring were attacked by this insect. Raspberries were badly infested with Byturus last year. The beetles were eating the stamens of the blossoms and into the young fruit that had formed.

CUTWORMS (Noctuidae)

Connecticut

W. E. Britton (May 22): Reported from Coventry, Bolton, and Sinsbury attacking strawberries. At Sinsbury two species had ruined one corner of a field (1/3 to 1/2 acre in a field of 2 to 3 acres), apparently the species are Agrotis ypsilon Rott., and Feltia venerabilis Walk., the former being the more abundant on May 20, when the field was visited by Mr. Walden.

A NIPIDULID (Brachypterolus pulicarius L.)

New York

C. R. Crosby and assistants (May 9): This small beetle is found in most strawberry plantings in Dutchess County, feeding on blossoms.

FLOWER THRIPS (Frankliniella tritici Fitch)

Missouri

L. Haseman (May 5): In the southwestern part of the State some berry-men report that the thrips are so abundant on blossoms that they are blighting late blossoms. More abundant as compared with an average year.

Neely Turner (May 12): The thrips have been especially noticed since a late freeze in the southwestern part of the State, killing

some of the blossoms. The attacked blossoms often contained 50 to 100 immature thrips. The actual loss is probably small.

IMBRICATED SNOOT BEETLE (Epicaerus imbricatus Say)

Missouri L. Haseman (May 12): In the southwestern part of the State a few strawberrymen reported abundance of beetles recently in strawberry fields, no serious damage being reported.

A STRAWBERRY SLUG (Empria fragariae Rohwer)

Nebraska M. H. Swenk (April): The first report of injury to strawberries by the early strawberry slug, Empria fragariae, was received on April 17 from Lancaster County.

STRAWBERRY LEAF ROLLER (Ancylis comptana Froehl.)

Missouri Neely Turner (May 12): The first brood is well along and they are present in somewhat unusual numbers in the southwestern part of the State. Very few of the growers are spraying this season and the pest may cause some damage later in the summer. Abundance as compared with an average year seems to be more than usual.

STRAWBERRY WEEVIL (Anthonomus signatus Say)

New York C. R. Crosby and assistants (May 9): Has been noted in many plantings in Dutchess County but the injury so far is slight. (May 13): Injury first noted on this date in Ulster County.

North Carolina F. Sherman (May 13): This pest is reported as more destructive than usual in commercial strawberry fields in southeastern part of the State.

ASPARAGUS

ASPARAGUS BEETLE (Crioceris asparagi L.)

Connecticut W. E. Britton (May 22): At Barkhamsted, Windsor, and Southington this insect is attacking asparagus. Both species appearing in Southington.

Maryland E. N. Cory (April 27): At College Park this insect is attacking asparagus and is more abundant at this time than in previous year.

Indiana J. J. Davis (May 25): Reported on May 19 from Marion as destructive.

Iowa C. J. Drake (May 7): The common asparagus beetle occurs in large numbers at Oelwein. The beetles are depositing eggs.

BEANS

IMBRICATED SNOOT BEETLE (Epicaerus imbricatus Say)

Tennessee S. Marcotitch (April 1): Several acres of garden beans destroyed by the imbricated snout beetle at Knoxville.

BEAN LEAF ROLLER (Goniurus proteus L.)

Florida

G. L. Garrison (May 18): Garden beans were heavily infested by the bean leaf roller at Quincy. Lead-arsenate spray gave good control.

CORN EAR WORM (Heliothis obsoleta Fab.)

Florida

F. S. Chamberlin (May 5): Snap beans in Gadsden County are slightly infested with larvae of the corn ear worm.

SEED CORN MAGGOT (Hylemyia cilicrura Rond.)

New York

E. P. Felt (May 25): Attacked sprouting lima beans at Wading River, L. I., occasioning some complaint. The injury is probably consequent on cool wet weather.

MEXICAN BEAN BEETLE (Epilachna corrupta Muls.)

Ohio

H. A. Gossard (May 22): Mexican bean beetles appeared in the field at Chillicothe on May 12, and eggs were deposited on cages on May 15.

PEAS

CORN EAR WORM (Heliothis obsoleta Fab.)

Mexico

A. W. Morrill (May 11): This insect was unusually abundant in the vegetable growing sections of the west coast of Mexico (States of Sonora and Sinaloa) during the months of February, March, and April. One close observer, superintendent of a ranch, reported about 1 per cent infestation in the peas brought to the packing shed. The harvesting season was over so it was too late to verify the percentage, but specimens were found in the old fields sufficient for identification. About one hundred miles south in the Sinaloa River Valley the manager of a ranch where several hundred acres of peas were grown for spring shipments reported an average of approximately 15 per cent damage by the bollworm. An examination of 114 pods selected at random from the bins in the packing shed showed 55 or approximately 50 per cent damaged with a total of three live specimens present inside the pods. This is the first time in my four years contact with West Coast vegetable growing conditions that an attack of this kind on peas has been reported or observed. In the Fuerte Valley at about the same latitude as the point where the above mentioned observations were made in the Sinaloa Valley there has been an unusual amount of damage to tomatoes from the bollworm. This damage had reached as high as 20 per cent in some fields, and was increasing when my last observations were made about the 20th of April. In the Culiacan Valley, less than 100 miles farther south, early in April it was observed that bollworm damage was much more extensive than observed during the last four years. A rough estimate in one field of 300 acres placed the damage at not less than 25 per cent.

PEA APHID (Illinoia pisi Kalt.)

Mississippi. R. W. Harned (April 21): Mr. F. A. Wright, of the Bureau of Entomology, with headquarters at Bay St. Louis, reports on April 21 as follows: In this vicinity the pea aphid is causing a great deal of damage, both to garden peas and sweet peas, and in some instances they have caused almost total destruction. This is the first serious damage I have observed in this locality.

CUCUMBERS

POTATO FLEA-BEETLE (Epitrix cucumeris Harr.)

Connecticut W. E. Britton (May 22): At Southington, Windsor, Locks, and Plainsville, this insect is reported attacking tomatoes and cucumbers.

SPRINGTAILS (Sminthurus sp.)

Virginia Herbert Spencer (April 29): Springtails are attacking cucumbers, cantaloupes, and cymplings in the Norfolk trucking section. These insects appear regularly every year about this time and do considerable damage to these crops.

STRIPED CUCUMBER BEETLE (Diabrotica vittata Fab.)

Indiana H. F. Dietz (April 28): The striped cucumber beetle was reported as working on young muskmelons plants in "flats" in cold frames at Decker on April 16.

MELONS

MELON APHIS (Aphis gossypii Glover)

California B. A. Harrigan (April 20): This insect is reported as doing considerable damage this year. It is practically impossible to cite specific localities where injury has occurred as it has been so general and extensive.

ONIONS

ONION THRIPS (Thrips tabaci Lind.)

California B. A. Harrigan (April 20): This insect is reported as doing considerable damage this year. It is practically impossible to cite specific localities where injury has occurred as it has been so general and extensive.

ONION MAGGOT (Hylemyia antiqua Meig.)

Indiana J. J. Davis (May 25): Onion maggots were reported from Milford on May 19.

Illinois W. P. Flint (May 22): C. C. Compton reports the onion maggot adults in the northern Illinois trucking sections on May 12. This was the first heavy emergence of adults during the present spring.

SPINACHSPINACH LEAF MINER (Pegomya hyoscyami Panz.)

- Connecticut R. B. Friend (May 23): Adults emerged in New Haven May 10-22; also reported from Middletown.
- Maryland E. N. Cory (April 27): Eggs and larvae in abundance on spinach at College Park.

S O U T H E R N F I E L D - C R O P I N S E C T S

COTTONBOLL WEEVIL (Anthonomus grandis Boh.)GENERAL
STATEMENT

Co-operative Report on Boll Weevil Emergence from Cage Tests Prior to May 1.

The percentage of weevils placed in cages last fall which had emerged prior to May 1 at the different points is shown in the following table:

<u>Locality</u>	<u>Per. cent of number put into cages which have emerged</u>
Auburn, Alabama - - - - -	11.54
College Station, Texas - - - - -	5.27
Florence, South Carolina - - - - -	4.66
Baton Rouge, Louisiana - - - - -	4.37
Clemson College, South Carolina - - - - -	2.78
Experiment, Georgia - - - - -	1.33
Aberdeen, North Carolina - - - - -	.84
Rocky Mount, North Carolina - - - - -	.32
Holly Springs, Mississippi - - - - -	.08
Tallulah, Louisiana - - - - -	.01

The most interesting figure so far this spring is the exceedingly high emergence of 11.54 per cent at Auburn, Ala. Approximately the same number of weevils were placed in the same cage during the fall of 1923 and up to this date in 1924 no weevils had emerged.

At Florence, S. C., the emergence in 1924 prior to May 1 was 0.15 per cent. This year, however, the emergence prior to May 1 was 4.66 per cent.

The survival at College Station, Tex., continues to approach a normal one.

At Tallulah, La., in the average of nine years, about 40 per cent of the total emergence has been completed by May 1. The average emergence prior to May 1 in the last nine years is about 0.60 per cent. This year, however, the emergence is only 0.01 per cent.

It is interesting to note that the weevil emergence is still progressing, further indicating that the weevils have been able to survive the winter in fair numbers at most stations.

Co-operative Report on Boll Weevil Emergence from Cage Tests Prior to May 16.

The percentage of weevils placed in cages last fall which had

emerged prior to May 16 at the different points is shown in the following table:

<u>Locality</u>	<u>Per cent of number put into cages which have emerged.</u>
Auburn, Alabama - - - - -	13.49
Baton Rouge, Louisiana - - - - -	5.58
College Station, Texas - - - - -	5.49
Florence, South Carolina - - - - -	5.15
Clemson College, South Carolina - - - - -	3.28
Experiment, Georgia - - - - -	1.44
Aberdeen, North Carolina - - - - -	.84
Rocky Mount, North Carolina - - - - -	.37
Holly Springs, Mississippi - - - - -	.08
Tallulah, Louisiana - - - - -	.01

At Tallulah, La., in the average of the last nine years, about 65 per cent of the total emergence has been completed prior to May 16. The average emergence prior to this date has been about 0.99 per cent. This year the emergence to the same date was only 0.01 per cent.

At Florence, S. C., 56 per cent of the total emergence was completed prior to May 16 in 1924. The emergence was 0.19 per cent. This year the emergence prior to the same date was 5.15 per cent. At points near College Station, Tex., in 1906, 1907, and 1908, the average total survival was 5.2 per cent. About 92 per cent of the total emergence was completed in these years prior to May 16. The average emergence on the same date was about 4.8 per cent. This year on the same date the emergence was 5.49 per cent.

At Auburn, Ala., in 1924 no weevils had emerged under the same cage condition prior to May 16, while this year 13.49 per cent had emerged.

It is interesting to compare the weevil emergence during the last three fifteen-day periods. At all points, with the exception of Auburn, Ala., a total of 293 weevils emerged from April 1 to 15, a total of 639 weevils from April 16 to 30, and a total of 210 from May 1 to 15.

At Brownsville, Tex., on May 14, Mr. T. C. Barber examined 142 fallen cotton squares for weevil stages. In this number 61 larvae, 9 pupae, and 1 adult that had emerged were found, making a total of 71 living weevil stages. The most interesting point is the fact that adults weevils of the first brood have just started to emerge. These squares were collated in a field that was estimated to have 362 hibernated weevils per acre on April 15. The weevil infestation in that vicinity is extremely spotted, in some places being very heavy and in others very light.

North Carolina Franklin Sherman (May 13): We have five field cages under observation, stocked with 3,249 weevils. However, I think our truest inference may be drawn from two particular cages which appear to approach closest to natural conditions of hibernation.

At the end of April, in one of these cages (in the southern portion of the State) 1.40 per cent of the weevils had emerged; in the other cage (northeastern portion of the State) 1.06 per cent had emerged. Combined they show an emergence of 12 out of 949 weevils, or 1.26 per cent at the end of April, and this, I believe, to be our truest indication of what has happened in North Carolina. Messrs. Lieby and Harris in work with peach insects at Aberdeen, N. C., jarred the boll weevil from peach trees in mid-April.

Alabama J. M. Robinson (April 29): Boll weevils have been very active the last week in emerging from hibernation cages in rather large numbers. As many as 116 emerged in one day.

COTTON LEAFWORM (Alabama argillacea Hbn.)

Texas F. L. Thomas (telegram dated May 27): Larvae of Alabama argillacea were abundant in two fields ten miles south of here (Corpus Christi). High percentage of natural control, as most of the pupae found were dead. Farmers are spraying and dusting.

T. C. Barber (May 23): Have observed light outbreaks of the cotton leaf caterpillar in at least two fields in the Brownsville locality. This is unusually early in the season for this insect to appear.

SUGARCANE BEETLE (Eutheola rugiceps Lec.)

Louisiana J. W. Ingram (May 11): The stand of cotton was being seriously thinned by sugarcane beetles in a field about one mile north of Mermentau. Many dead and dying cotton plants were dug up and beetles were found feeding on them.

CUTWORMS (Noctuidae)

Alabama J. M. Robinson (April 29): The young cotton in southern Alabama has been attacked by one of the cutworms. There were as many as twelve picked up on a little over an acre of ground. Many of the fields are being replanted.

WOOLLY-BEAR CATERPILLAR (Diacrisia virginica Fab.)

Texas F. L. Thomas (May 9): The second brood has occurred this season at Palacios, Matagorda County, in southern Texas. Caterpillars are abundant and may cause considerable damage if not controlled.

COTTON APHID (Aphis gossypii Glover)

Texas J. L. Webb (May 12): G. A. Maloney of the Tallulah Laboratory reports the cotton louse active on cotton in southern Texas.

TOBACCO

CUTWORMS (Noctuidae)

Virginia & Kentucky S. E. Crumb (May 21): Mr. Gilmore recently sent me a lot of cutworms taken injuring newly-set tobacco with the request that I determine them and send the determination to you. The material

was from Appomattox, Virginia, and consisted of the following species.

Feltia ducens Walker 26 larvae
Feltia gladiaria Morr. 2 larvae
Polia renigera Stephens 1 larva.

There is considerable complaint of cutworm injury in tobacco plant beds in the region about Lexington. The principal species concerned is Feltia gladiaria Morr.

BUDWORM (Heliothis virescens Fab.)

Florida F. S. Chamberlin (May 8): At Gadsden the budworm infestation on tobacco is much below normal at the present. This is apparently due to the prolonged drought which either delays or prevents the emergence of moths from the soil.

GREEN PEACH APHID (Myzus persicae Sulz.)

Florida F. S. Chamberlin (May 4): This species of aphid has been taken from tobacco plants recently at Quincy. It does not appear to thrive upon this food plant and no damage to the crops has yet been observed.

RICE

RICE STALK BORER (Chilo plejadellus Zinck.)

Louisiana J. W. Ingram (May 15): The first moth emerged in the hibernation cages at Crowley on this date.

SUGARCANE BEETLE (Eutheola rugiceps Lec.)

Louisiana J. W. Ingram (May 21): The damage to rice by sugarcane beetles has continued heavy in unflooded fields during the month at Crowley. In the flooded fields the damage to rice on the levees has been heavy, in some cases resulting in a loss of as much as one-half of the stand.

SUGARCANE

SUGARCANE BORER (Diatraea saccharalis Fab.)

Georgia Monthly Letter of the Bureau of Entomology No. 132 (April): The first definite record of the sugarcane moth borer in the region of Cairo, Ga., has been furnished by Dr. P. A. Yoder, of the Bureau of Plant Industry, who brought a living specimen to this Bureau for identification.

F O R E S T A N D S H A D E - T R E E I N S E C T S

MISCELLANEOUS FEEDERS

JUNE BEETLES (Phyllorhaga spp.)

Missouri L. Haseman (May 14): At night the beetles are so abundant in trees in central Missouri as to sound like a swarm of bees. About

4 or 5 different species are represented.

GIPSY MOTH (*Porthetria dispar* L.)

California Weekly News Letter, Calif. S. D. A., Vol. 7; No. 9 (May 2): Nine kinds of insect pests were found upon inspection of 1,027 oak logs from Japan. Among the insect pests taken was an egg mass of the dreaded gipsy moth.

BAGWORM (*Thyridopteryx ephemeraeformis* Haw.)

Missouri L. Haseman (May 12): This pest was very serious last year and we are expecting a heavy infestation again this year. Have already been hatching in laboratory and will soon be out in field. Attacking evergreens and shade trees mostly, and is general over the State.

Arkansas W. J. Baerg (April 30): Bagworms began hatching on April 25. Judging from the numerous parasites that have emerged from bags collected in the field during the winter time, the bagworms will probably appear in reduced numbers, and in this locality (Fayetteville), at least, severe injury by bagworms is not expected.

Kansas J. W. McColloch (May 21): Bagworms are reported on cedars in Franklin and Wilson Counties.

ARBORVITAE

RED SPIDER (*Tetranychus* sp.)

Mississippi R. W. Harned: (We have been notified by James Brodie of Biloxi, that arborvitae plants in that vicinity are being seriously attacked by the red spider.

ARBORVITAE LEAF MINER (*Argyresthia thuifella* Pack.)

New York E. P. Felt (May 25): The work of this insect is somewhat prevalent here and there on Long Island ornamentals and has also been reported from Rochester, the latter by Mr. R. E. Horsey of the Department of Public Parks of that City. The species attacks *Thuja occidentalis* and also *T. plicata* but does not affect *T. orientalis*, nor *T. standishi* according to Mr. Horsey.

BASSWOOD

TINGIDS

Minnesota C. E. Mickel (May 4): At Savage, in the heavy woods, the leaves of basswood were rather heavily infested with tingids. These insects, however, do not appear to be general in their distribution, as they have not been found on basswoods in other localities.

BOX-ELDER

BOX-ELDER Aphid (*Periphyllus negundinis* Thos.)

Indiana H. F. Dietz (April 29): Boxelder aphid from Connersville submitted

on April 25 for identification. According to the report received the lice were abundant enough on the infested trees to cause them to shed part of their leaves.

Nebraska M. H. Swenk (April): The boxelder aphid was reported injuring boxelder foliage on April 25 from Kearney County.

CAMPHOR

CAMPHOR SCALE (Pseudaonidia duplex Ckll.)

Louisiana H. K. Plank (May 14): A number of twigs and leaves moderately to heavily infested with this scale were received with a note that the trees infested were purchased in New Orleans about 1920. This is the first infestation known to occur in Vermilion Parish.

ELM

WOOLLY APPLE APHID (Eriosoma lanigerum Hausm.)

Alabama J. M. Robinson (April 29): At Decatur the elm trees are heavily infested with the woolly apple aphid.

ELM APHID (Myzocallis ulmifolii Monell)

California White C. Barber (May 5): Serious honeydewing, on ornamentals along streets and highways at Bakersfield.

ELM BORER (Saperda tridentata Oliv.)

Nebraska M. H. Swenk (April): Correspondence indicated about the normal amount of trouble with the elm borer.

ELM LEAF BEETLE (Galerucella xanthomelaena Schrank)

New York E. P. Felt (May 25): Adults have wintered in large numbers in houses in several Hudson Valley localities and present indications are favorable for severe injury in numerous areas where the insect was abundant last year.

Ohio E. W. Mendenhall (May 15): Spraying is carried on here quite extensively for the elm pests. It is one of the first outbreaks of the elm leaf beetle here, (Dayton).

ELM SCURFY SCALE (Chionaspis americana Johns.)

Indiana J. J. Davis (April 30): Eggs of this species on elm are hatching at Lafayette. May have begun to hatch a day or two before.

LARCH

LARCH CASE BEARER (Coleophora laricella Hbn.)

Connecticut W. E. Britton (May 13): At Rainbow (Town of Windsor), new leaves are apparently mined. Twigs brought in by W. O. Filley, Forester.

OAK

OAK LECANIUM (Lecanium quercifex Fitch)

Alabama J. M. Robinson (April 29): The scale insect on water oaks, Lecanium quercifex, has been attracting considerable attention in many localities in the State.

CALIFORNIA OAK WORM (Phryganidia californica Packard)

California H. E. Burke (April 27): At Palo Alto the California oak worm is much more abundant than for the last four years. Many estate owners are now spraying for it.

OAK ERIOCOCCUS (Eriococcus quercus Comst.)

California T. D. Urbahns (March 28): At Victorville this insect is abundant on oak. Specimens determined by Dr. E. P. Felt.

KERMES SP.

Alabama Neale F. Howard (May 12): This is the first year that we have received complaints of damage at Birmingham. A specimen has been brought in and two phanecalls have been received. Determination made by Wm. Middleton.

PINE

NANTUCKET PINE MOTH (Rhyacionia frustrana Comst.)

Louisiana Monthly Letter of the Bureau of Entomology No. 132 (April, 1925): While on a recent trip to Bogalusa, La., Mr. St. George collected a large quantity of longleaf pine shoots (Pinus palustris) which were heavily attacked by the Nantucket pine moth. This year's growth was heavily infested with young larvae.

WHITE GRUBS (Phyllophaga spp.)

Maine Edith M. Patch (April 27): Thousand of white pine seedlings (two year seedlings) killed in State Forestry Nursery on U. of M. Campus. They did not attack Scotch pine or Austrian pine but killed out 90 per cent of the white pine. Similar damage is reported in European nursery stock. Several years ago we had a similar attack in the same nursery.

PINE LEAF SCALE (Chionaspis pinifoliae Fitch)

Indiana J. J. Davis (April 30): I noticed eggs of this insect hatching today.
H. F. Dietz and J. J. Davis (May 8): Active crawlers were observed at Indianapolis. Probably at least 60 per cent have hatched and it is believed that hatching has been going on for at least a week.

Nebraska M. H. Swenk (April): About the normal amount of trouble with the pine-leaf scale.

WILLOW

COTTONWOOD LEAF BEETLE (Lina scripta Fab.)

Indiana F. N. Wallace (April 29): Poplar and willow-leaf beetles, Lina scripta Fab. and L. interrupta Fab., were observed in numbers on willows north of Indianapolis on April 23.

INSECTS ATTACKING GREENHOUSE

AND ORNAMENTAL PLANTS

MISCELLANEOUS FEEDERS

APHIDIDAE

Virginia W. S. Abbott (May 18): Aphids are numerous on ornamentals of all kinds at Fairfax.

Georgia Oliver I. Snapp (May 15): There has been scarcely any rain at Fort Valley for two months. Aphids, which were very abundant earlier in the season, are now giving no trouble.

TULIP SCALE (Toumeyella liriodendri Gmel.)

Georgia Oliver I. Snapp (April 1): A banana shrubs at Montezuma was very heavily infested with this scale.

AZALEA LEAF MINER (Gracilaria azaleaeella Meyr.)

Wisconsin E. L. Chambers (January 10): Has been injurious in greenhouse for several years at Milwaukee, attacking azalea.

ONION THRIPS (Thrips tabaci Lind.)

Indiana E. F. Dietz (May 19): Very abundant on various flowers all over the State.

RED SPIDER (Tetranychus telarius L.)

Indiana H. F. Dietz (April 28): This pest was reported as damaging young evergreen seedlings in a nursery south of Indianapolis on this date.

FLORIDA RED SCALE (Chrysomphalus aonidum L.)

Louisiana H. K. Plank and assistants (May 13): Since the freeze of January, 1924, this scale has not been noted on any out-of-door plants, except those which have been recently transplanted from greenhouses. In this locality, (New Orleans) this pest is chiefly confined to greenhouses and conservatories, and it is of considerable economic importance there, as heretofore.

COTTONY CUSHION SCALE (Icerya purchasi Mask.)

Louisiana

H. K. Plank (May 12): The increase of this pest at New Orleans during the past fall and winter was sufficient to cause general alarm, and fear was entertained by some that the infestation would approach the seriousness of that of 1915-1917, when numerous other plants than Pittosporum tobira, Plumbago sp., Ulmus sp., Ficus pumila, and Magnolia grandiflora, were heavily infested and considerably injured before Novius cardinalis could be satisfactory colonized. However, since the finding of larvae of the Novius at work on numerous infestations throughout the city on February 3, 1925, and subsequently, the abundance of the cottony cushion scale has been so reduced that it is now very difficult to find any live adults anywhere in the city. The injury to the hosts mentioned has therefore been comparatively slight.

DICTYOSPERMUM SCALE (Chrysomphalus dictyospermi Morg.)

Louisiana

H. K. Plank and assistants (May 13): Since the freeze of January, 1924, this scale has been increasing only very gradually and very locally. It is still of comparatively no economic importance out-of-doors, except on a few cycads and climbing figs in one or perhaps two places in the city. Attacking Cycas revoluta, Ficus pumila, and Cinnamomum camphora.

BOXWOOD

BOXWOOD LEAF MINER (Monarthropalpus buxi Labou.)

New York

C. R. Crosby and assistants (May 16): Hedges in one locality in Nassau County were very severely infested with this leaf miner.

E. P. Felt (May 25): Is locally abundant and very injurious to ornamental box in the southern Hudson Valley and on Long Island, individual plantings here and there being very seriously infested.

Pennsylvania

C. A. Weigel (May 14): Mr. Doucette reports that Mr. Smith, who represents the Pennsylvania Bureau of Plant Industry, has reported the first emergence of the boxwood leaf-miner, Monarthropalpus buxi Labou., adults on May 8.

COLUMBINE

COLUMBINE LEAF-MINER (Phytomyza aquilegiae Hardy)

Nebraska

M. H. Swenk (May 25): Cultivated columbine plants seriously damaged early in May in Boone County.

SERPENTINE LEAF-MINER (Agromyza pusilla Meig.)

Indiana

H. F. Dietz (May 19): Bad on Aquilegia (columbine) around Indianapolis.

COLEUS

GREENHOUSE ORTHEZIA (Orthezia insignis Doug.)

New York C. R. Crosby and assistants (February 7): Badly infested plants were received from Rochester attacking coleus.

CHRYSANTHEMUM

CHRYSANTHEMUM GALL MIDGE (Diarthronomyia hypogaea F. Loew)

Wisconsin E. L. Chambers (January 19): At Wauwatosa this insect was attacking chrysanthemums, in a greenhouse.

CAPE JESSAMINE

CITRUS WHITEFLY (Dialeurodes citri Ashm.)

North Carolina F. Sherman (May 13): Several times complained of as a pest on foliage of Cape Jessamine plants.

HOLLY

HOLLY LEAF-MINER (Phytomyza ilicis Curtis)

New York E. P. Felt (May 25): Has maintained itself for several years at least in the vicinity of Westbury, L. I., seriously infesting groups of holly on several estates.

LILAC

OYSTER-SHELL SCALE (Lepidosaphes ulmi L.)

Indiana B. A. Porter (May 21): Two serious infestations on lilac reported. Young scales first noted on May 6, but had been hatched for several days, probably since April 26, since the weather between these dates was unseasonably cold.

IRIS

IRIS ROOT BORER (Macronoctua onusta Grote)

Indiana H. F. Dietz (May 19): The iris root borer is very well scattered over the State and is unusually abundant this year, doing great damage to ornamental plantings.

ROSE

GREEN FRUITWORMS (Xylina spp.)

Indiana H. F. Dietz (May 19): A number of larvae of the green fruit cutworms, Xylina spp., have been collected, feeding on rose buds in gardens around Indianapolis.

FLOWER THRIPS (Frankliniella tritici Fitch)

Indiana H. F. Dietz (May 19): Thrips very abundant on various flowers all over State.

Mississippi

R. W. Harned (May 21): During the past month many complaints have been received from all parts of Mississippi in regard to the injury caused to roses by thrips. Specimens received from several correspondents have been sent to Prof. Glenn W. Herrick at Cornell University. In each case only nymphs were present. Prof. Herrick has tentatively identified them as Frankliniella tritici.

SURINAM ROACH (Pycnoscelus surinamensis L.)

Pennsylvania

C. A. Weigel (May 14): Under date of April 2, we received specimens of the Surinam roach, Pycnoscelus surinamensis, from the vicinity of Philadelphia. In the letter which accompanied these specimens the statement was made that they were seriously injuring roses grown in greenhouses. This species has previously been reported as injurious to roses, lilies, poinsettias, and other plants grown under glass.

Mr. Doucette in a letter dated May 10 makes the following report: A very heavy infestation of the Surinam roach has been discovered through H. F. Dietz and T. L. Guyton in one of the large commercial rose houses in this vicinity. An examination of this infestation revealed that they were feeding on rose and that the infestation is so heavy that the stems of probably 30,000 or more plants have been girdled for about 2 to 4 inches above the ground, which will make it impossible for the plants to "come back" after they have been rested and "cut back." We have seen only 3 or 4 cases of feeding on any other parts of the plants. The owners have already used over 150 gallons of kerosene in trying to control these roaches. This has been applied on the walks and on the edges of the rose beds. The infestation is still very heavy although very large numbers have been killed by the oil. We are now conducting experiments with various insecticides and chemicals that have been reported as effective against this species.

POTATO APHID (Illinoia solanifolii Ashm.)

New York

C. R. Crosby and assistants (May 16): Has been observed to be very abundant on this host in certain areas.

SPIRAEA

APHIDIDAE

Indiana

J. J. Davis (April 30): Plant lice are unusually abundant at Lafayette; aphids on spiraea and boxelder especially abundant. Parasites and predacious enemies becoming abundant.

Missouri

L. Haseman (May 14): This louse is with us every year at this season. I am not sure as to the species. It is general all over the State.

SNOWBALL

SNOWBALL APHID (Anuraphis viburnicola Gill.)

Nebraska

M. H. Swenk (April): The first complaint of injury by the snowball aphid was received from Platte County on April 27.

BLUE GRASS

WHITE GRUBS (Phyllophaga spp.)

Kansas

J. W. McColloch (May 21): Severe injury to blue-grass lawns by white grubs has been reported from Scott City and from Sawyer.

I N S E C T S A F F E C T I N G M A N A N D

D O M E S T I C A N I M A L S

MAN

FLEAS (Siphonaptera)

Indiana

J. J. Davis (April 30): Reports of serious outbreaks of fleas at LaCrosse, LaPorte, and Greensburg. In some instances fleas are so bad in farm buildings that they are carried into the house so as to make it unbearable even at night in bed.

Missouri

L. Haseman (May 12): We have never had so many calls for control recommendations for fleas so early in the year. It is widely distributed all over the State.

DOG FLEA (Ctenocephalus canis Bouche)

Mississippi

K. L. Cockerham (May 21): The common dog flea has been a household pest in this vicinity (Biloxi) during all the spring, especially during April and May. Instances have occurred where it was necessary to apply insecticides to rid dwellings of them. Creolin washes, kerosene spray, and flaked naphthalene were used effectively.

Nebraska

M. H. Swenk (April): Much more than the normal number of complaints of infestations, past and developing, with the dog flea.

AMERICAN DOG TICK (Dermacentor variabilis Say)

Nebraska

M. H. Swenk (May 25): A woman seriously infested by this tick in Kearney County on May 5th.

CATTLE

CATTLE GRUBS (Hypoderma bovis DeG. and
H. lineatum DeVill.)

Ohio

F. C. Bishopp (April 16): Cattle evidently being attacked today by heel flies, H. lineatum. A considerable number of grubs are still present in backs of cattle. Species not determined.

HORN FLY (Haematobia irritans L.)

Ohio

F. C. Bishopp (April 16) A few horn flies, present on cattle, probably do not average more than 4 or 5 per head. (April 28): Horn flies now average as high as 100 per head on some herds and are causing some annoyance.

BLACK FLY (Simulium spp.)

Ohio F. C. Bishopp (April 28): Two species of Simulium were found to be attacking dairy cows. A good number were present but were not numerous enough to cause worry.

POULTRY

SMALL BODY HEN LOUSE (Menopon pallidum Nitzsch)

Ohio F. C. Bishopp: Numerous in the vicinity of Columbus.

CHICKEN FLUFF LOUSE (Goniocotes hologaster Nitzsch)

Ohio F. C. Bishopp (April 10): Numerous in the vicinity of Columbus.

CHICKEN HEAD LOUSE (Lipeurus heterographus Nitzsch)

Ohio F. C. Bishopp (April 10): Head lice not so generally distributed in the different pens at Columbus.

LARGE BODY HEN LOUSE (Menopon biseriatum Piag.)

Ohio F. C. Bishopp (April 10): Body lice, Menopon biseriatum, very abundant on some of the fowls in certain pens at the poultry plant of the Ohio State University.

CHICKEN MITE (Dermanyssus gallinae Redi).

Missouri L. Haseman (May 12): In the central part of Missouri these mites are worse than I have ever seen them before. As compared with an average year they seem to be more abundant.

ROSE CHAFER (Macrodactylus subspinosus Fab.)

Indiana J. J. Davis (May 25): Has been reported injuring poultry from Corydon May 18, West Baden May 22, and Evansville May 23. The county agent at Evansville writes that the infested area is larger than last year and that the beetles are feeding on cherries, peaches, grapes, plums, garden beans, curly dock, locust, mulberries, and a number of shrubs.

RAT LICE

Indiana J. J. Davis (May 25): White rats used for experimental purposes were reported by a company in Evansville May 9 as heavily infested with lice. The species has not yet been determined.

INSECTS INFESTING HOUSES

AND PREMISES

ANTS (Formicidae)

Mississippi R. W. Harned (May 23): Complaints have been received from several

parts of the State in regard to ants this spring.

Nebraska

M. H. Swenk (April): More than the usual number of inquiries on the control of ants in lawns are being received, indicating a supernormal amount of injury of that sort.

HOUSE FLY (Musca domestica L.)

Ohio

F. C. Bishopp (April): On April 5 a few house flies were present, some entering office buildings and residences. (April 17): House flies have increased considerably in number and are now causing some annoyance in residences. (April 28): No material increase in number of house flies apparent since April 17.

TERMITES

North Carolina F. Sherman (May 13): Reticulitermes flavipes reported as destructive to fire hose, possibly a new "food plant."

Ohio

H. A. Gossard (May 22): Termites were reported attacking a dwelling house at Harpster, April 8. Each year we get a greater number of reports of damage of this kind than in the preceding year. Furnace-heated houses and basements are making life possible for these tropical insects and all old construction houses with timbers in contact with the earth seem ultimately doomed to destruction unless concrete foundations are put in.

Indiana

J. J. Davis (May 25): Injury to woodwork in a house reported on May 2 from Monticello.

Illinois

W. P. Flint (May 22): A number of reports of damage by Reticulitermes flavipes Kol. have been received during the last two months. Several of these have been investigated and in at least two cases the damage will amount to several thousand dollars. One of these, a modern brick schoolhouse with wooden floor timbers and wooden sheathing on the stairs and doorways, has been damaged to such an extent that the interior will have to be re-finished throughout.

Kansas

J. W. McColloch (May 21): Termite injury to dwellings has been reported from Parsons and Great Bend. At Manhattan termites ruined the woodwork in one of the largest business houses. A sample of flour was received from Clay Center which had been infested by termites. Undoubtedly the sack of flour had been resting on a wood floor.

Nebraska

M. H. Swenk (April): Another report of injury to a house by the termite Reticulitermes tibialis Banks was received during April from Fairfield in Clay County. (May 18): A house in Hall County was reported as damaged by this insect on this date.

A LAWN ANT (Myrmica brevinodis Emery)

Montana

R. A. Cooley (May 4): Troublesome on lawns and entering houses at Bozeman; widely distributed in Montana, reported this year and every year.

A MYRIAPOD (Scutigera immaculata Newp.)

Ohio

HacA. Gossard (May 22): The symphylid Scutigera immaculata Newport was doing considerable damage to greenhouse crops in Cincinnati in April. Some growers think damage is reduced by using plenty of well-rotted barnyard manure. This decaying organic matter supplies the natural food of the insect so it is not obliged to attack growing crops, according to the theory of these growers.

CLOVER MITE (Bryobia practiosa Koch)

Wisconsin

S. B. Fracker (May 1): Two reports of invasion of houses by mites coming from clover in lawns at Milwaukee and Waupaca.

INSECTS INJURIOUS TO
STORED PRODUCTS

SOUTHERN COWPEA WEEVIL (Mylabris ^{dis}quarimaculatus Fab.)

California

Monthly Letter of the Bureau of Entomology No. 132 (April): In April C. K. Fisher examined, at Chino, Calif., a stock of bean straw which had stood out in the open two winters and one summer. Many black-eyed cowpeas were found infested with Mylabris quarimaculatus Fab. Enough weevils were found breeding in the seeds which had escaped the threshing operation to furnish a source of infestation for the coming growing season. Last fall an investigation of infestations in the Chino region showed that this same stock of bean straw was responsible for infestation in 1924 of beans growing as far as one and one-fourth miles away. Mr. Fisher also found Mylabris obtectus Say breeding in another stock of red kidney bean straw two years old.

BEAN WEEVIL (Mylabris obtectus Say)

Wisconsin

S. B. Fracker (March 1): The unusual number of complaints were received during the winter. It is general throughout Wisconsin.

ANGOUMOIS GRAIN MOTH (Sitotroga cerealella Ol.)

Maryland

Perez Simmons and Geo. W. Ellington (May 23): Adults of the Angoumois grain moth began to emerge May 23 at Silver Spring from infested wheat stored during the winter at out-door temperature.

NOTES FROM THE FEDERAL HORTICULTURAL BOARD

INTERCEPTIONS

April, 1925

The following important interception was recently reported by the inspector at Philadelphia. A bundle of broomcorn, manifested as whisk brooms, was found in cargo discharged from the SS. Ossa from Italy. Specimens of the European corn borer (Pyrausta nubilalis Hbn.) were collected from the shipment which was abandoned by the consignee and destroyed.

On February 14, 1925, a collaborator of the Federal Horticultural Board found a sack containing several hundred citrus leaves in the suitcase of a passenger arriving at Key West from Cuba. The passenger was going to Tampa, Florida. The leaves were infested with citrus blackfly. This interception presents a striking example of the necessity of close supervision of baggage inspection.

Since the last issue of the letter of Information, determinations have been received for interceptions of larvae, pupae, and adult of Mediterranean fruit fly (Ceratitis capitata Wied.) as follows: In commercial shipments of oranges from Spain, taken at New York, January 19th, 23d, and 26th; in commercial shipments of sour oranges from Sicily at New York, January 30th, February 11th and 17th; in bitter oranges from Italy at New York, February 11th, in tangerines, Mandarin var., arriving at New York as cargo from Messina, Italy, January 19th; in green olives from passenger's baggage from Italy at New York, December 6th, 1924, and in quince from passenger's baggage from Syria at Providence, D. I. November 13, 1924.

The larvae of the West Indian fruit fly (Anastrepha fraterculus Wied.) were taken by a New York inspector from guavas from Porto Rico, December 24, 1924. The guavas were brought in as baggage.

An unidentified species of Anastrepha was found at New York February 5, 1925, infesting mangos from Peru. The mangos were in ship's stores.

A very important interception is credited to the Board's collaborator at Jacksonville, Florida, who found in the post office at Jacksonville and diverted to Washington, D. C., about February 1st, a package from Cuba containing cotton bolls. The bolls were infested with living larvae of the pink bollworm.

Philopodon plagiatus Schallen, a European weevil of the family Otiorhynchidae, which is not known to occur in this country, was taken from vegetable seed arriving by mail at the Inspection House

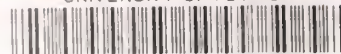
in Washington, D. C., from Holland, January 30, 1925. The specialist who identified the weevil states that it is an injurious species.

A mealybug (Pseudococcus maritimus Ehr.) on apple from the Azores was collected at Providence, R. I., by inspectors from Boston, October 22, 1924. The specialist who made the identification stated: " I believe a new distribution record."

An identification has recently been received of a potentially dangerous potato weevil (Epicaerus cognatus) specimens of which were collected at Galveston, Texas, October 17, 1924, in potatoes from Vera Cruz, Mexico. The potatoes were in ship's stores. So far as is known this insect does not occur in the United States.

Inspectors at Key West, in the ordinary course of routine inspection work, March 28, 1925, discovered in the ship's stores of a Standard Oil Tanker from Tampico, México, a quantity of grapefruit and oranges. Inspection of this material showed no external evidence of infestation of any kind, that is, of fruit fly. A number of the fruits were cut and in three of the grapefruit a large number of larvae were discovered. None were found in the oranges which were dissected. Specimens were forwarded to Washington and identified by the specialists as larvae of Anastrepha ludens Loew. The above interception strikingly emphasizes the danger of introducing pests in stores of oil tankers and clearly shows that the inspection of such vessels is very necessary.

UNIVERSITY OF FLORIDA



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